



THE ELAMITE WORLD

EDITED BY JAVIER ÁLVAREZ-MON,
GIAN PIETRO BASELLO
AND YASMINA WICKS



VISIT...

LANZAROTE
Caliente.COM

The Elamite World



Amongst the civilizations to participate in the dynamic processes of contact and interchange that gave rise to complex societies in the ancient Near East, Elam has remained one of the most obscure, at times languishing in the background of scholarly inquiry. In recent years, however, an increasing body of academic publications have acknowledged its relevance and suggested that its legacy was more considerable and long-lasting than previously estimated.

The Elamite World assembles a group of 40 international scholars to contribute their expertise to the production of a solid, lavishly illustrated English-language treatment of Elamite civilization, covering topics such as its physical setting, historical development, languages and people, material culture, art, science, religion and society. Also treated are the legacy of Elam in the Persian empire and its presence in the modern world.

This comprehensive and ambitious survey seeks for Elam, hardly a household name, a noteworthy place in our shared cultural heritage. It will be both a valuable introductory text for a general audience and a definitive reference source for students and academics.

Javier Álvarez-Mon, a native of Spain, holds degrees in ancient Near Eastern art and archaeology from the École du Louvre (Paris) and the University of California at Berkeley, respectively. A 2003 Fullbright-Hays fellow, he is presently Associate Professor in Near Eastern Archaeology and Art at Macquarie University (Australia) and 2014–2018 Future Fellow (Australian Research Council). His primary research interests are the ancient Iranian civilizations of Elam and early Achaemenid Persia. He has two forthcoming books, *Monumental Reliefs of the Elamite Highlands* and *The Art and Culture of Elam*.

Gian Pietro Basello (PhD in the Ancient Near East 2005) is Tenured Lecturer (2018–) at “L’Orientale” University of Naples, Italy, where he has been teaching Elamite language since 2010. He has worked since 2003 on the Iranian-Italian joint Project DARIOSH (Digital Achaemenid Royal Inscription Open Schema Hypertext). His researches are also devoted to ancient calendars and systems for recording time. His website is www.elamit.net.

Yasmina Wicks completed her PhD “‘Alas, Short is the Joy of Life!’: Elamite Funerary Practice in the First Half of the First Millennium BCE” (2017) at the University of Sydney,

Australia, where she remains a research affiliate. She has authored a monograph *Bronze 'Bathtub' Coffins in the Context of 8th-6th Century BC Babylonian, Assyrian and Elamite Funerary Practices* (2015) and several articles on the material culture of first millennium Elam.

The Routledge Worlds

THE ISLAMIC WORLD

Edited by Andrew Rippin

THE WORLD OF POMPEII

Edited by Pedar W. Foss and John J. Dobbins

THE RENAISSANCE WORLD

Edited by John Jeffries Martin

THE GREEK WORLD

Edited by Anton Powell

THE ROMAN WORLD

Edited by John Wacher

THE HINDU WORLD

Edited by Sushil Mittal and Gene Thursby

THE WORLD OF THE AMERICAN WEST

Edited by Gordon Morris Bakken

THE ELIZABETHAN WORLD

Edited by Susan Doran and Norman Jones

THE OTTOMAN WORLD

Edited by Christine Woodhead

THE VICTORIAN WORLD

Edited by Marin Hewitt

THE ORTHODOX CHRISTIAN WORLD

Edited by Augustine Casiday

Forthcoming:

THE MORMON WORLD

Edited by Carl Mosser, Richard Sherlock

THE BUDDHIST WORLD

Edited by John Powers

THE ETRUSCAN WORLD

Edited by Jean MacIntosh Turfa

THE GOTHIC WORLD

Edited by Glennis Byron and Dale Townshend

THE ATLANTIC WORLD

Edited by D'Maris Coffman, Adrian Leonard, and William O'Reilly

THE POSTCOLONIAL WORLD

Edited by Jyotsna G. Singh and David D. Kim

THE SUMERIAN WORLD

Edited by Harriet Crawford

THE OCCULT WORLD

Edited by Christopher Partridge

THE WORLD OF INDIGENOUS NORTH AMERICA

Edited by Robert Warrior

THE WORLD OF THE REVOLUTIONARY AMERICAN REPUBLIC

Edited by Andrew Shankman

THE SHAKESPEAREAN WORLD

Edited by Jill L. Levenson and Robert Ormsby

THE WORLD OF COLONIAL AMERICA

Edited by Ignacio Gallup-Diaz

THE MODERNIST WORLD

Edited by Allana Lindgren and Stephen Ross

Forthcoming:

THE WORLD OF GREAT ZIMBABWE

Edited by Innocent Pikirayi

THE MEDIEVAL WORLD, SECOND EDITION
Edited by Peter Linehan, Janet L. Nelson, and Marios Costambeys

THE EARLY CHRISTIAN WORLD, SECOND EDITION
Edited by Philip F. Esler

THE SWAHILI WORLD
Edited by Stephanie Wynne-Jones and Adria LaViolette

THE ELAMITE WORLD
Edited by Javier Álvarez-Mon, Gian Pietro Basello, and Yasmina Wicks

The Elamite World



Edited by

Javier Álvarez-Mon, Gian Pietro Basello, and Yasmina Wicks

 **Routledge**
Taylor & Francis Group
LONDON AND NEW YORK

First published 2018
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge
711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2018 selection and editorial matter, Javier Álvarez-Mon, Gian Pietro Basello and Yasmina Wicks; individual chapters, the contributors

The right of Javier Álvarez-Mon, Gian Pietro Basello and Yasmina Wicks to be identified as the authors of the editorial material, and of the authors for their individual chapters, has been asserted in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data
A catalog record for this book has been requested

ISBN: 978-1-138-99989-3 (hbk)
ISBN: 978-1-315-65803-2 (ebk)

Typeset in Sabon
by Apex CoVantage, LLC

Contents

[*List of figures*](#)

[*List of tables*](#)

[*List of contributors*](#)

[Introduction](#)

Javier Álvarez-Mon, Gian Pietro Basello, and Yasmina Wicks

[Part I: Imagining Elam: the history of research and its sources](#)

[1 Ælam regio: Elam in Western scholarship from the Renaissance to the late 19th century](#)

Daniel T. Potts

[2 Elam and the Bible](#)

Peter Dubovský

[3 France and Elam](#)

Nicole Chevalier

[4 Between orientalism and Persomania: The presentation of the Iranian collections at the Louvre](#)

Marianne Cotty

[5 Elamite forgeries and the antiquities market](#)

Oscar White Muscarella

[Part II: The land and peoples of Elam](#)

6 Physical geography and environment of Elam

Cameron A. Petrie, Morteza Djamali, and Matthew D. Jones

7 Metals and mining

Barbara Helwing

8 The peoples of Elam

Ran Zadok

9 Elamites and Iranians

Jan Tavernier

Part III: Elam through history

10 The birth of Elam in history

Piotr Steinkeller

11 The Old Elamite period

Luca Peyronel

12 Elam in the Middle Elamite period

Behzad Mofidi-Nasrabadi

13 The last centuries of Elam: the Neo-Elamite period

Elynn Gorris and Yasmina Wicks

Part IV: Close encounters on the eastern and western fronts

14 Great Domino games: from Elam, looking eastwards

Massimo Vidale

15 Elam and Babylonia c. 1400–1100 BC

Ran Zadok

16 Elam and Assyria

Peter Dubovský

[17 Propaganda and symbolism: representations of the Elamites at the time of Ashurbanipal](#)

Shahrokh Razmjou

[Part V: Language and writing in Elam](#)

[18 Prehistoric administrative technologies and the ancient Near Eastern redistribution economy: the case of greater Susiana](#)

Denise Schmandt-Besserat

[19 The proto-Elamite writing system](#)

Jacob L. Dahl

[20 Linear Elamite writing](#)

François Desset

[21 The Elamite language](#)

Jan Tavernier

[22 Writing in Elam](#)

Jean-Jacques Glassner

[23 Elamite royal inscriptions](#)

Florence Malbran-Labat

[24 Elamite administration](#)

Gian Pietro Basello and Grazia Giovino

[Part VI: The material culture of Elam](#)

[25 Elamite architecture](#)

Behzad Mofidi-Nasrabadi

[26 Elamite ceramics](#)

Bernadette K. McCall

[27 The metal arts of Elam](#)

François Bridey

[28 The industry of vitreous materials in Elam](#)

Noëmi Daucé

[29 Origins of monumental sculpture in Elam: Two case studies](#)

Holly Pittman

[30 The sculptural arts of Elam](#)

Javier Álvarez-Mon

[31 Glyptic in the 4th–2nd millennium](#)

Enrico Ascalone

[32 Glyptic in the 1st millennium](#)

Mark B. Garrison

[33 Elamite dress and textiles](#)

Trudy S. Kawami

[Part VII: Elamite society](#)

[34 Cuneiform culture and science, calendars, and metrology in Elam](#)

Gian Pietro Basello and Enrico Ascalone

[35 Elamite religion and ritual](#)

Enrique Quintana

[36 Elamite funerary practices](#)

Hermann Gasche and Steven W. Cole

[37 Women of Elam](#)

Aurelie Daems

[38 Music](#)

Bo Lawergren

[Part VIII: The legacy of Elam](#)

[39 Elamite administrative and religious heritage in the Persian heartland](#)

Wouter F.M. Henkelman

[40 The Elamite artistic heritage of Persia](#)

Javier Álvarez-Mon

[41 Elam in Achaemenid studies](#)

Adriano V. Rossi

[Index](#)

Figures

- [3.1 Jane and Marcel Dieulafoy, Frédéric Houssaye and Charles Babin at Susa 1885](#)
- [3.2 Jacques de Morgan in the “Château” of Susa](#)
- [3.3 Jacques de Morgan and Father Vincent Scheil](#)
- [3.4 The *Acropole* and the “Château” of Susa in 1913](#)
- [3.5 The statue of Queen Napir-Asu in the “Château” of Susa, January 1903](#)
- [3.6 Yedda and André Godard and Roland de Mecquenem at Susa around 1930](#)
- [3.7 Family tomb of the Neo-Elamite period. Excavations to the east of the Achaemenid palace](#)
- [3.8 Roman Ghirshman in front of the inscription commemorating the arrival of Jacques de Morgan 70 years earlier, Susa 1967](#)
- [3.9 Jean Perrot and Pierre Amiet in the “Château” of Susa, 1977](#)
- [4.1 Schematic layout of the Iranian rooms at the Louvre Museum](#)
- [4.2 Inauguration of the Dieulafoy collections](#)
- [4.3 *Salle Dieulafoy* in about 1910](#)
- [4.4 *Salle Dieulafoy, grande salle de Suse*](#)
- [4.5 *Salle Dieulafoy, petite salle de Suse* in about 1947](#)
- [4.6 *Salle de la Susiane. Mission J. de Morgan* in the Assyrian gallery \(1909\)](#)
- [4.7 Rooms 3 and 4 in the exhibition *Fouilles de Tello, de Suse et de Syrie* in the Musée de l’Orangerie \(1930\)](#)
- [4.8 *Salle Morgan II* in about 1950](#)
- [5.1 \[a\] Photograph of an Iranian forger’s shop \(Muscarella\); \[b\] Helmet in the Metropolitan Museum of Art purchased in 1963](#)
- [5.2 *Bitumen Roundels*](#)
- [5.3 *Objects from the Kalmakara Cave*: \[a\] Silver Rhyton; \[b\] Lion attacking a bull; \[c\] Silver rhyton](#)
- [5.4 \[a\] Silver vessel, Christie’s sales catalogue, London 2011; \[b\] Bronze nude male; \[c\] Copper/bronze finial; \[d\] Bitumen vessel](#)
- [6.1 Map showing the topographic variation of the regions that comprise ancient Elam, including the distribution of intermontane valleys and plains and the routes that are likely to have linked them together](#)

- [6.2 Four palaeoclimate records from lakes in the Zagros over the last 5000 years. The records are shown in a north \(top\)- south \(bottom\) gradient and include \$\delta^{18}\text{O}\$ records from Lakes Mirabad, Zeribar and Parishan and the Ti record from Neor Lake](#)
- [6.3 Phytogeographical subdivision of Iran according to \(a\) Zohary \(1973\) and \(b\) White and Léonard \(1991\). Note that the transition from Irano-Turanian flora to Saharo-Sindian or Saharo-Arabian/Sudanian flora occurs within the ancient Elam; \(c\) shows the main vegetation types found in SW Zagros and Khuzestan plain in the Elam territory](#)
- [6.4 Examples of different vegetation types: \(a\) Zagros oak woodland, \(b\) Oak-pistacio woodland \(road from Borujen to Lordegan\), \(c\) Almond scrubs \(near Jahrom\), \(d\) Saharo-Sindian 'pseudo-savanna' with *Ziziphus spina-christi* scrubs \(near Lar\)](#)
- [7.1 Map of Iran, showing known copper and silver deposits, and the archaeological sites discussed in the text](#)
- [7.2 Anthropomorphic figurines from Susa, 2nd millennium BCE, as an example of casting in lost wax technique](#)
- [7.3 Statues of worshippers in solid gold and silver from the so-called *trouvaille de la statuette d'or* at Susa](#)
- [7.4 Middle Elamite Statue of Queen Napir-Asu from Susa](#)
- [7.5 Model of a Middle Elamite ritual scene from Susa, so-called *sit-shamsi*](#)
- [7.6 Animal-headed bracelet from the "tomb of the two Elamite princesses" at Jubaji](#)
- [10.1 Map of Middle Asia during the 3rd millennium BC](#)
- [10.2 Statue of Eshpum](#)
- [10.3 The roundlet of Naram-Suen](#)
- [12.1 The genealogy of the Igihalkids according to the inscription of Shilhak-Inshushinak](#)
- [12.2 Genealogy of Igihalkid proposed by Goldberg](#)
- [12.3 Monumental complexes at Haft Tappeh based on geophysical prospections](#)
- [12.4 Plan of the ancient city Al-Untash-Napirisha \(today's Chogha Zanbil\)](#)
- [12.5 Artworks from the ME II and III phases; a: Stele of Untash-Napirisha; b: Brick reliefs of Shilhak-Inshushinak from Susa](#)
- [13.1 The First Neo-Elamite Dynasty](#)
- [13.2 The Hubanid dynasty](#)
- [13.3 Map indicating main sites mentioned in text](#)
- [13.4 Plan of tell of Susa indicating excavation areas](#)
- [13.5 Top: Vaulted mud-brick tomb in the Apadana cut to the east of Darius' palace at Susa; bottom: characteristic NE I material](#)
- [13.6 Characteristic NE II material \[a\] ceramics; \[b\] glazed vessels and figurine from Susa and \[c\] "inkwell" from Susa; \[e, f, g, h\] metal objects from Jubaji and \[d, i\] metal objects from Arjan](#)
- [13.7 Line drawing of Kul-e Farah IV](#)

- 14.1 The eastern polities of the 3rd millennium BC as reconstructed by Piotr Steinkeller (1982), in a map drafted by F. Desset
- 14.2 A silver goblet chased in the “Bactrian” style, in a private collection, showing a cortege escorting a handcuffed prisoner
- 14.3 A drawing of the same silver goblet, with a rendering of the main pattern
- 14.4 Drawing of the partial impression of a cylinder belonging to Enheduanna, daughter of Sargon, found at Ur
- 14.5 Drawing of the impression of a cylinder seal belonging to Ishar-Beli, an officer of Tar’am-Agade, daughter of Naram-Sin, found at Urkesh
- 14.6 3D rendering of the impression of the cylinder of Ibni-Sharrum, scribe of king Sharkali-sharri
- 14.7 Drawing of the impression of a cylinder seal of a scribe of Gudea
- 17.1 Top: Elamites rejoicing next to a river filled with bodies from the battle of Til-Tuba, Room 33, Southwest Palace, Nineveh; bottom: Elamite envoys Umbadara and Nabudamiq at the Assyrian court, Room 33, Southwest Palace, Nineveh
- 17.2 Top: Elamite prisoners marching, Room F, North Palace, Nineveh; bottom: A child with bow and quiver among Elamite troops, North Palace, Nineveh
- 17.3 Top: An Elamite with his Elamite style sword submits to the newly installed king Ummanigash, Room 33, Southwest Palace, Nineveh; bottom: Elamite female musicians, Room 33, Southwest Palace, Nineveh
- 17.4 Top: Teumman and his son injured under their wrecked chariot, Room 33, Southwest Palace, Nineveh; bottom: An Assyrian soldier decapitating Teumman, Room 33, Southwest Palace, Nineveh
- 17.5 Top: Ummanigash introduced as new king to the Elamites by an Assyrian official, Room 33, Southwest Palace, Nineveh; bottom: The capture scene of Ummanaldash, Southwest Palace, Nineveh
- 17.6 Top: Crouching leopard with spots, Southwest Palace, Nineveh; bottom: Water stream with fish and snake(?), depicted on the capture scene of Ummanaldash, Southwest Palace, Nineveh
- 17.7 Top: An Elamite royal member pleading to Ashurbanipal for protection from an approaching lion, Room S (Panel 10), North Palace, Nineveh; bottom: Two Elamite kings being forced to serve Ashurbanipal, fallen into Room S, North Palace, Nineveh
- 17.8 Top: Detail of the Elamite king with his round-shaped royal hat, North Palace, Nineveh; bottom: Hack marks made over Assyrian soldier to stop him from killing Tammartu, Room 33, Southwest Palace, Nineveh
- 18.1 A. The ritual delivery of offerings at the gate of Eanna, the temple of Inanna in Uruk, Mesopotamia. Carvings on the Uruk stone vessel; B and C. Susa: the storage of goods in public warehouses. Sealings; D. Sealing; E. Sealing

- [18.2 Administrative Technology at Chogha Bonut. Plain Tokens](#)
- [18.3 Personage belonging to the period of the Susa I temple](#)
- [18.4 Administrative Technology at Susa. Complex tokens](#)
- [18.5 Token collections of Uruk and Susa](#)
- [18.6 Tokens series](#)
- [18.7 Sealings picturing the En, Priest-King of Uruk, in Greater Susiana. A. Chogha Mish; B. Susa](#)
- [18.8 Envelope from Susa, Sb 1940](#)
- [19.1 Sb 15188. Drawing of proto-Elamite tablet recording large amounts of cereals. Note that in publications proto-Elamite tablets are rotated 90° W, to conform with the direction of publication of all early cuneiform tablets](#)
- [19.2 Sb 22232. Proto-Elamite tablet with scribal design](#)
- [20.1 The 32 Linear Elamite inscriptions known in 2015](#)
- [20.2 Near Eastern writing systems map showing between the second half of the 3rd and the beginning of the 2nd millennium BC the sites where have been found cuneiform texts, Indus writing inscriptions, LE inscriptions and the recently discovered geometric writing](#)
- [20.3 LE signs list](#)
- [20.4 Different writings of ^dIn/PUZUR šušinak and texts where they are displayed.](#)
- [20.5 LE signs 70 and 94–95 and texts where they are displayed](#)
- [20.6 LE inscriptions A' and graphical variation of the LE sign in between Susian texts and inscription A'](#)
- [20.7 Graphical variants of the LE sign in](#)
- [20.8 The Susian EL inscriptions A/B/C/E and F/G/H \(and U?\) and their semantic segments](#)
- [20.9 Susian EL texts A/B/C/E, F/G/H and I](#)
- [20.10 List of the accepted values for LE signs](#)
- [22.1 Seal from Oman; proto-Elamite sign m453](#)
- [22.2 Comparison between Urukian and proto-Elamite signs](#)
- [22.3 The Urukian sign é, líl, and kid; the proto-Elamite sign m145](#)
- [22.4 The signs maš and udu; and the signs m006, m006a, and m197](#)
- [22.5 The signs kalam and gan; the signs m206 and m217](#)
- [25.1 Schematic overview of two building stages of the “maison du culte” in Ville Royale A XV](#)
- [25.2 Schematic plan of large houses in *Ville Royale A* XIV and A XIII. a: House of Rabibi in *Ville Royale A* XIV; b: “East Complex” of A XIV; c: “East Complex” of A XIII](#)
- [25.3 Schematic variations of the main large hall in different levels in *Ville Royale* at Susa. a: First stage of the “maison du culte” in VR A XV; b: Second stage of the “maison du culte” in VR A XV; c: House of Rabibi in VR A XIV; d: “East Complex” in VR A XIII-XII](#)
- [25.4 Building in the level A XII in Ville Royale at Susa](#)

- [25.5 Palaces at Chogha Zanbil; a: The reconstruction of the Palace 2 and preserved dwelling on the southeast of the courtyard I; b: The ground plan of the Palace 3 at Chogha Zanbil](#)
- [25.6 Houses at Chogha Zanbil from a: the ME II period; and b: the beginning of the 1st millennium](#)
- [25.7 Administration building from the second building level \(ME I\) at Haft Tappeh](#)
- [25.8 Public construction from the ME III period at Tall-e Malyan](#)
- [25.9 Two gate variations at Chogha Zanbil](#)
- [25.10 Tomb buildings from the Middle Elamite period. a: Haft Tappeh; b: Chogha Zanbil, underground tombs are marked in grey](#)
- [25.11 Reconstruction of the path taken during the mortuary ceremony](#)
- [25.12 Spatial order of the Middle Elamite tomb buildings and the mythological relationship of their different sections](#)
- [25.13 Planning aspects of the middle wall area. a: The relationship of the tower *Nur kibrat* to the ziqqurra in the planning of the middle wall; b: The dimensions of the different sides of the middle wall](#)
- [25.14 Two building stages of the ziqqurra at Chogha Zanbil](#)
- [25.15 Different temple types at Chogha Zanbil. a: The temples on the northwestern side of the ziqqurra; b: The complex in the eastern corner of the middle wall](#)
- [28.1 Monumental glazed terracotta sculpture: temple gate guardians: \[a\] Lion from Susa; \[b\] Griffin from Chogha Zanbil; \[c\] Bull from Chogha Zanbil](#)
- [28.2 Glazed knobbed plaques from Chogha Zanbil. Plaques in situ in room 26; Plaque inscribed with the name Untash-Napirisha](#)
- [28.3 Monumental facade of moulded glazed bricks from Susa representing a royal couple, possibly Shilhak-Inshushinak and his queen \(1150–1120 BC\)](#)
- [28.4 Neo-Elamite faience statuettes from Susa. \[a\] Male worshiper; \[b, c\] Horse and bull knobs](#)
- [29.1 \[a\] Male statue. Inscribed. Eshpum; \[b\] Male statue holding goat; \[c\] Statue without goat](#)
- [29.2 \[a, b, e\] Puzur Inshushinak galet; \[c, d\] Line-drawing reconstructions of restored galet Sb 6 and Sb 177](#)
- [29.3 \[a\] View from the top of the Puzur Inshushinak galet; \[b\] Detail of erasing of the inscription; \[c\] Cup, with lion confronting bull; three snakes for handle; \[d\] Lions from the statue of the goddess Narundi](#)
- [29.4 \[a\] Line drawing of steatite canister with lion and bull. Confiscated from looters. Kerman Museum; \[b\] Carved bowl from Shahdad; \[c\] Seal impression from Konar Sandal South Tr. V-402 no. 40; \[d\] Baked brick with Linear Elamite Inscription from second citadel level of Konar Sandal South](#)
- [30.1 4th millennium and early 3rd millennium terracotta and stone miniature sculpture](#)

- [30.2 3rd millennium relief plaques and sculpture in limestone and bitumen](#)
- [30.3 3rd millennium monumental sculpture](#)
- [30.4 3rd millennium monumental stone sculpture](#)
- [30.5 Old Elamite. Kurangun monumental rock relief and terracotta sculpture](#)
- [30.6 Middle Elamite. Terracotta and faience sculpture](#)
- [30.7 Middle Elamite. Monumental stone sculpture and highland rock relief](#)
- [30.8 Neo-Elamite sculpture. \[a, b, c\] relief plaques; \[d\] base of sculpture; \[e\] stele of Atta-Hamiti Inshushinak; and \[f\] Neo-Elamite monumental rock relief from Kul-e Farah \(KF1\)](#)
- [30.9 Neo-Elamite highland reliefs from \[a\] Kul-e Farah \(KFIV\); and \[b\] Naqsh-e Rostam](#)
- [31.1 Regional developments of glyptic art during the Old-Elamite period](#)
- [31.2 \[a-b\] Susa A seal impressions from Susa; \[c-d\] Uruk-type seal impressions from Susa II; \[e-f\] Proto-Elamite seals from Susa III; \[g-h\] Early Dynastic seals \(Early group\) from Susa IVA; \[i-j\] Early Dynastic seals \(Later group\) from Susa IVA](#)
- [31.3 \[a-c\] Konar Sandal sealings; \[d\] Seal from Shahdad; \[e-f\] Awanite seals from Susa IVB; \[g-h\] Piedmont seals from Susa IVB; \[i-j\] Early South-Eastern Iranian seals from Shahdad; \[k\] Early South-Eastern Iranian seal from Tepe Yahya; \[l\] Early South-Eastern Iranian seal from Jalalabad](#)
- [31.4 \[a-b\] Early Old-Elamite seals from Susa; \[c\] Transitional Old-Elamite seal from ex Pahlavi Collection; \[d\] Transitional Old-Elamite seal from Susa; \[e-f\] Classic Old-Elamite seals from Susa; \[g\] Late Old-Elamite seal from ex Mazda Collection; \[h\] Late Old-Elamite seal from ex Pahlavi Collection](#)
- [31.5 \[a\] Early Anshanite seal from Susa; \[b\] Early Anshanite seal from Private Collection; \[c-d\] Classic Anshanite seals from Susa; \[e\] Eastern' Anshanite seals from Susa; \[f\] 'Eastern' Anshanite seals from Choga Mish; \[g-h\] Late Anshanite seal from Susa](#)
- [31.6 \[a\] Late South-Eastern Iranian seal from Tepe Yahya; \[b\] Late South-Eastern Iranian seal from Gonur depe; \[c\] Late South-Eastern Iranian seal from Susa; \[d\] Late South-Eastern Iranian seal from Töd; \[e\] Compartmented bronze stamp seals from Susa; \[f\] Pseudo-Indus cylinder seal; \[g\] Pseudo-Indus cylinder seal from Konar Sandal South; \[h\] South-Eastern Iranian-Bactrian-Harappan handled stamp-cylinder seal from Jalalabad; \[i-j\] Anshanite-Dilmunite cylinder seals from Susa; \[k-m\] Elamite-Indus rounded stamp seals; \[n\] Persian Gulf type seal from Tepe Yahya](#)
- [31.7 \[a\] South-Eastern Iranian-Margiana seal/amulet from Tepe Yahya; \[b\] South-Eastern Iranian-Margiana seal/amulet from Susa; \[c\] South-Eastern Iranian-Margiana seal/amulet from antiquary market; \[d\] South-Eastern Iranian-Margiana handled stamp seal from Tepe Yahya; \[e-f\] South-Eastern Iranian-Margiana handled stamp seals from Shahdad; \[g\] South-Eastern Iranian-Margiana handled stamp seal from Tepe Giyan; \[h\] Konar Sandal seal from Trench V; \[i-n\] Anshanite-Dilmunite rounded stamp seals from](#)

Susa

- 31.8 [a-b] Middle-Elamite seals from Susa; [c-e] Middle-Elamite sealings from Haft Tepe; [f-h] Middle-Elamite seal from Choga Zanbil
- 32.1 Amiet no. 16
- 32.2 Seal of Kuraš the Anzanite, Son of Šešpeš, preserved in the Fortification archive at Persepolis (PFS 93*)
- 33.1 The garb of Puzur-Inshushinak
- 33.2 [a] Seal impression of sukkalmah Tan-Uli from Susa. no. Sb 8748; [b] Offering figures of gold from Susa. no. Sb 2759 (front) and Sb 2758 (back)
- 33.3 Middle Elamite female garbs. [a] Faience (?) figure of standing female from Choga Zanbil. Louvre, acc. no. Sb 5089; [b] Central section of the stone stele of Untash Napirisha from [c] Bronze statue of queen Napir Asu from Susa. Louvre, acc. no. Sb 2731
- 33.4 [a] Cylinder seal belonging to Ginadu, an official (puhu-teppu); [b] Royal family in the Relief of Shekaft-e Salman II
- 33.5 [a] Engraved chalcedony of Shilhak Inshushinak. British Museum 113886; [b] Fragmentary bitumen relief of seated female from Susa; [c] Elamite rock relief at Naqsh-e Rostam
- 33.6 [a] Depictions of King Teumman in the battle of the Ûla(-)ya River at Tell Tuba; [b] King Umanaldash/Humban-Haltaš III; [c] Detail of relief of Kul-e Farah I
- 36.1 Map of Iran showing archaeological sites mentioned in text
- 36.2 Susa, Ville Royale. Ghirshman's Chantier A. Levels XII *ancien* and *récent* (ca. 1500–1440 BC)
- 37.1 [a] clay funerary head from Susa; [b-d] naked female terracotta figurines from Susa
- 37.2 [a] painted clay head from Kabnak; [b] ivory figurine from Susa; [c] faience figurine from Choga Zanbil
- 37.3 [a] Shikaft-i Salman rock relief depicting Elamite royal family; [b] *la fileuse* bitumen relief
- 37.4 Seal and sealing images showing women partaking in everyday activities: [a] carpet weaving; [b] dairy processing; [c] milking a goat
- 37.5 Terracotta plaques and figurine: [a] naked couple in bed; [b] naked woman in bed; [c] seated breastfeeding woman; [d] standing breastfeeding woman
- 38.1 [a] Impression of cylinder seal from Chogha Mish ca. 3200 BCE. [b] Consecration plaque from Susa, ca. 2750–2600 BCE. Louvre Museum Sb14
- 38.2 [a] Arched harps from the 3rd millennium. [a.a] Susa, 2700 BCE; detail based on the consecration plaque shown in Figure 38.1b; [a.b] Khafajah, Mesopotamia, 2700 BCE; detail of a consecration plaque; [a.c] Bismaya, Mesopotamia, 2900–2650 BCE; part of a chlorite vessel from Bismaya; [b] Bull lyres from the 3rd millennium; [b.a] Shown on a

- [plaque made of shell and lapis lazuli mounted on the front of a bull-lyre in University Museum, University of Pennsylvania, ca. 2450 BCE; \[b.b\] Impression of a cylinder seal from Susa, ca. 2450 BCE; \[b.c\] Impression of a stamp seal from Failaka, ca. 1900 BCE](#)
- [38.3 Impressions of cylinder seals from Susa, ca. 2700 BCE](#)
- [38.4 Elamite and Mesopotamian angular harps](#)
- [38.5 \[a\] Animal orchestra from Susa, 8th–7th century BCE; \[b\] Line drawing of the animal orchestra shown on the large orthostat from Tell Halaf, 9th to 8th century BCE](#)
- [38.6 Rock carving of harp ensembles at Kul-e Farah, 9th–7th century BCE. The figure is based on Lawergren 2001: 527, Figure 7](#)
- [38.7 \[a\] Elamite orchestra marching outside the city of Madaktu. Wall relief in an Assyrian palace, Nineveh, 660–650 BCE; \[b\] Ashurbanipal and companion drinking to the music of a large orchestra. Wall relief in the North Palace at Nineveh, 645–635 BCE; \[c\] A scene inscribed in a bronze bowl from Arjan, ca. 650 BCE](#)
- [40.1 \[a\] First known photograph of the winged protective genius from Gate R at Pasargadae taken by F. Stolze in 1874; \[b\] line drawing](#)
- [40.2 Line drawings of the Elamite kings Te-Ummman; and \[b\] Humban-Haltaš III; Representations of Persian royal bodyguards in different media; \[c\] glazed tiles from Susa; \[d\] slab relief from Persepolis; \[e\] line-drawing of king Xerxes; \[f\] the Persian king under an umbrella at Persepolis](#)
- [40.3 Façade, elevation and section of the Tomb of Darius I at Naqsh-e Rostam](#)
- [40.4 Composite line-drawings of the apadana staircase reliefs, North wing](#)
- [40.5 Throne Hall. Audience scene and guards of the eastern doorway in the northern wall, west jamb](#)
- [40.6 Statue of Darius](#)
- [40.7 Relief of Kul-e Farah IV, panel A](#)
- [40.8 Relief of Kul-e Farah III, southern face](#)
- [40.9 Relief of Kul-e Farah VI](#)

Tables

- [9.1 Elamite and Iranian names in MDP texts](#)
- [11.1 Most probable sequence of Elamite rulers during the Old Elamite period – Sukkalmah dynasty](#)
- [12.1 Proposed dating systems for the Middle Elamite period](#)
- [12.2 Relative chronology of different building levels in excavated areas at Haft Tappeh](#)
- [13.1 Various periodizations proposed for the Neo-Elamite period](#)
- [14.1 Historical evidence of interaction between the Mesopotamian states and the eastern polities across the Iranian Plateau, ca. 2900/2800 to 1800 BC. The ethnonym of Marhaši, for simplicity, is here maintained in place of the Akkadian Barahshum](#)
- [14.2 Material evidence of interaction between a series of excavated early urban poles of the Iranian Plateau in the second half of the 3rd millennium \(ca. 2600–1800 BC\)](#)
- [16.1 Reports on military encounters between Assyria and Elam in the royal inscriptions](#)
- [18.1 Plain token types and subtypes](#)
- [20.1 List of the 32 Linear Elamite inscriptions](#)
- [20.2 Distribution of the Linear Elamite signs in the 32 inscriptions](#)
- [26.1 Elamite ceramic characteristics by phase](#)
- [31.1 Comparative analysis among areas, periods and classes of seal production](#)
- [34.1 Material and shapes of weights from Susa](#)
- [34.2 The local system at Susa](#)
- [34.3 Metrological distribution of weights from Susa not belonging to the local system](#)
- [34.4 Weights and possible-weights* from Haft Tepe](#)
- [34.5 Weights or possible-weights from the Iranian plateau](#)
- [34.6 Weights from Baluchistan, Margiana and Makran coast](#)
- [39.1 List of deities mentioned more than once in the fortification archive](#)

Contributors

Javier Álvarez-Mon, a native of Spain, holds degrees in ancient Near Eastern art and archaeology from the École du Louvre (Paris) and the University of California at Berkeley, respectively. A 2003 Fullbright-Hays fellow, he is presently Associate Professor in Near Eastern Archaeology and Art at Macquarie University (Australia) and 2014–2018 Future Fellow (Australian Research Council). His primary research interests are the ancient Iranian civilizations of Elam and early Achaemenid Persia. He has two forthcoming books, *Monumental Reliefs of the Elamite Highlands* (Eisenbrauns) and *The Art and Culture of Elam* (Routledge).

Enrico Ascalone, University of Copenhagen (Saxo Institute), was qualified as Associate Professor in “Cultures of the Ancient Near East” in 2014. Author of books on World Archaeology (1999), Archaeological Methodology (2001 and 2004), Near Eastern and Mediterranean Weighing Systems (2006 and 2011), Mesopotamian Civilization (2005), Archaeology of Ancient Iran (2006 and 2015), Eblaite Weighing System (2006), Elamite Glyptic Art (2011), and Oxus-Jiroft Intercultural Relations (in press), he has been co-director of the Joint-Archaeological Mission at Qaleh Kuthek (Jiroft Valley) and is now the director of the Multidisciplinary Archaeological Italian Project at Shahr-i Sokhta (Sistan-va-Baluchistan).

Gian Pietro Basello (PhD in the Ancient Near East 2005) is Tenured Lecturer (2018–) at “L’Orientale” University of Naples, Italy, where he has been teaching Elamite language since 2010. He has worked since 2003 on the Iranian-Italian joint Project DARIOSH (Digital Achaemenid Royal Inscription Open Schema Hypertext). His researches are also devoted to ancient calendars and systems for recording time. His website is www.elamit.net.

François Bridey is curator in charge of the collections of Iran and Central Asia at the Near Eastern Antiquities Department of the Louvre Museum and teaches Art and Archaeology of Ancient Iran at the École du Louvre in Paris. Among his numerous research projects are a study of Susa I ceramics and the preparation of a catalogue of the metal works and artifacts from Susa and Chogha Zanbil housed in the Louvre.

Nicole Chevalier is a former member of the Department of Oriental Antiquities at the

Louvre Museum (France). She was the editor of *Une mission en Perse 1897–1912* (1997) and the author of *La recherche archéologique française au Moyen-Orient 1842–1947* (2002) and *Chroniques des premières missions archéologiques françaises à Suse d'après les photographies et les mémoires de l'architecte Maurice Pillet 1912–1913* (2009).

Steven W. Cole (PhD, Mesopotamian History, University of Chicago) is a Mesopotamian historian. His focus is Babylonia, and his scholarly interests are in the comparative study of the interactions of tribes and towns, the social and political phenomena of frontiers, and the changing ecological conditions of the lower Mesopotamian plain. Over the past two decades, Cole has been engaged in a collaborative, multidisciplinary attempt to establish the locations and characteristics of the Euphrates, Tigris, Karun, and Kerkhah River systems of lower Iraq and southwest Iran through antiquity. He is particularly interested in how these systems influenced the formation of political institutions and the structure of social groups. Cole is the author or co-author of four books. Prior to joining the Northwestern University faculty, where he is currently Senior Lecturer of Classics, he held appointments at Harvard University, the University of Helsinki, and the University of Chicago.

Marianne Cotty is head of the Resource and Documentation Center of the Department of Near Eastern Antiquities of the Louvre, where she has prepared major exhibitions on Mesopotamian and Arabian archaeology. She received a postgraduate degree on the Bronze Age Bactrian seals from the faculty of Rennes, France. As an archaeologist specialized in the Arabian Peninsula and Indo-Iranian sphere, she has been involved in several international archaeological expeditions in Oman, Saudi Arabia, Uzbekistan, Iran, and at the present time, Bahrein.

Aurelie Daems holds a PhD from Ghent University in Near Eastern Archaeology. Her research includes the analysis of women in pre-Islamic Iran, the reassessment of functions and uses of human figurines in the later prehistory, as well as issues that engender transformations and change through time. She has published articles in numerous peer-reviewed journals and written book chapters, and has excavated throughout a large part of the Near East. She has been editor-in-chief of *Collect*. Currently she is dividing her professional time as a teaching assistant at Ghent University and as editor-in-chief of *MER. Paper Kunsthalle*.

Jacob L. Dahl is Associate Professor of Assyriology at the University of Oxford. He has written on early Babylonian socio-economic history, early Near Eastern writing systems, and Sumerian literature. He works on the decipherment of proto-Elamite, the last undeciphered writing system from the ancient Near East with a substantial number of sources (more than 1,600 tablets divided between the Louvre Museum and the National Museum of Iran). Professor Dahl is a co-PI of the Cuneiform Digital Library Initiative <<http://cdli.ucla.edu>>, and

he has led recent advances in the image capture of cuneiform tablets and cylinder seals.

Noëmi Daucé is heritage curator currently in charge of archaeology for the Agence France Muséums, which carries out the Louvre Abu Dhabi project. In the Iranian domain, her principal research has concentrated on the production of Achaemenid decorative bricks from the collections conserved in the Louvre, in Tehran, and in Susa. She also coordinated the online publication of the reports of Roland de Mecquenem, director of the archaeological mission at Susa between 1912 and 1939.

François Desset (PhD Université Paris 1 Panthéon Sorbonne) is a French archaeologist specialized in Chalcolithic and Bronze Age Iran (4th–2nd millennium BC). Committed for several years to the archaeological project of the Halil Rud valley (Kerman province), he currently conducts research at Tehran University, notably on the undeciphered Iranian writing systems.

Morteza Djamali is a research scientist (CR1) at the CNRS. He obtained his PhD from the Aix-Marseille Université (IMBE) in 2008 in the field of Population Biology and Ecology (specialising in Quaternary Palynology) and has worked at the Mediterranean Institute for Biodiversity and Ecology (IMBE) in Aix-en-Provence since 2011. His main expertise is the pollen analysis of sediments, and his research is focused on Quaternary plant ecology in the Middle East with a particular focus on the Iranian Plateau, exploring the role of human activities and late Quaternary climate change on the vegetation and plant diversity in the Irano-Turanian region.

Peter Dubovský (born 1965) studied biblical exegesis at the Pontifical Biblical Institute (SSL, 1999) and obtained his ThD in 2005 at Harvard Divinity School. He has authored numerous articles and book chapters, and a monograph entitled *Hezekiah and the Assyrian Spies: Reconstruction of the Neo-Assyrian Intelligence Services and Its Significance for 2 Kings 18–19* (2006, Biblica et Orientalia 49. Roma). He is currently dean at the Pontifical Biblical Institute in Rome and professor of the Old Testament and history.

Mark B. Garrison holds the Alice Pratt Brown Distinguished Professorship in Art History in the Department of Art and Art History at Trinity University in San Antonio, Texas, USA. His primary research interests are the glyptic arts of ancient Iran and Iraq in the first half of the first millennium BC. He specializes in the glyptic preserved in two large archives from Persepolis, the Persepolis Fortification archive and the Persepolis Treasury archive. His research has focused upon social aspects of glyptic production in workshops in Persepolis. His publications have also addressed the emergence and development of royal ideology in glyptic at Persepolis, religious imagery in Achaemenid art, and the relationship of glyptic of the

Achaemenid period with earlier glyptic traditions in Assyria, Babylonia, and Elam.

Hermann Gasche (PhD, *Pratiques funéraires en Mésopotamie et en Susiane*, EPHE, Paris) is an architect and archaeologist. He was field director at Susa, Bard-e Neshandeh and Masjid-e Soleiman (Iran) between 1962 and 1972, at Tell ed-Der, Sippar/Abu Habbah, Abu Qubur and Habl-as Sahr (Iraq) between 1970 and 1990, director of the excavations at Akhtamir (Armenia) between 1993 and 1996, and of an archaeological and environmental survey of southern Khuzistan in 2004. He was also director of the first phase of the Belgian Project *Mesopotamian History and Environment* and editor – with L. De Meyer – of the Series I: *Northern Akkad Project Reports* (1987–1996), II: *Memoirs* (1989–2014) and III: *Texts* (1991–2002), and of the *Occasional Publications* that appeared in 1991 and 1994.

Grazia Giovino (PhD in Philological Sciences of Ancient Western Asia 1987; Researcher in Assyriology 1997) studied Assyriology with Luigi Cagni at the Oriental Institute of Naples and, later, Elamite language with François Vallat at the French CNRS. She held one of the few university courses of the Elamite language in the world from 1999 until her retirement in 2010 at “L’Orientale” University of Naples. Among her many articles and publications is *60 testi economici della Mesopotamia datati al regno di Sargon* (Napoli: Istituto Universitario Orientale, 1987).

Jean-Jacques Glassner, born in 1944, is a French Assyriologist who specialises in the Mesopotamian world and cuneiform script. He is Director of research at the CNRS and has taught at the universities of Strasbourg, Poitiers, Geneva, Jerusalem, École Pratique des Hautes Etudes, and Ecole des Hautes Etudes en Sciences Sociales in Paris. Among his approximately 300 publications are *La Chute d’Akkadé. L’événement et sa mémoire*, *Chroniques mésopotamiennes* (translated into English), *Ecrire en Mésopotamie* (translated into English), *La Tour de Babylone*, *Que reste-t-il de la Mésopotamie*, and *Dictionnaire archéologique de la Bible* (dir.).

Elynn Gorris is a Postdoctoral Researcher of Ancient Near Eastern Studies at the Université catholique de Louvain (Louvain-la-Neuve, Belgium). In 2014 she defended her PhD on Neo-Elamite political history and chronology. Her current research focuses on the diplomatic and economical interaction between Elam, Mesopotamia, and the Arabian Peninsula during the first half of the 1st millennium BC.

Barbara Helwing is Professor of Middle Eastern Archaeology at the University of Sydney. She holds a PhD from the University of Heidelberg, and a habilitation from the University of Tübingen. Her research interests focus on archaeometallurgy and on early complex societies and states in Southwestern Asia. She has excavated widely in Iran and Turkey and has

explored the archaeology of these countries during her previous positions as Head of the Tehran Branch of the German Archaeological Institute and as lecturer at Bilkent University in Ankara.

Wouter F.M. Henkelman is Associate Professor of Elamite and Achaemenid studies at the École Pratique des Hautes Études (Paris). He is presently engaged in the edition and publication of a larger part of the Elamite tablets from the Persepolis Fortification Archive. In addition, he heads the Bisotun Project, set up to produce new editions and exhaustive commentaries on the Bisotun inscriptions and relief of Darius I. “The Other Gods Who Are,” his 2008 monograph based on the Fortification Archive, extensively treats the subject of Elamite-Iranian acculturation.

Matthew D. Jones is Associate Professor in Quaternary Science in the School of Geography at the University of Nottingham, United Kingdom. Matt’s research focuses on the interaction of people and the environment, particularly the quantity and quality of the water within it, including projects in modern-day Jordan, Turkey, and Iran. Matt’s other interests lie in developing methods to better quantify by how much water availability has changed through time, particularly through the use of oxygen isotope palaeohydrology.

Trudy S. Kawami, retired Director of Research for the Arthur M. Sackler Foundation, NYC, received her PhD in art history and archaeology from Columbia University, where she specialized in the art of ancient Western Asia. As an undergraduate, she spent the summer of 1963 in Esfahan and was mesmerized by Iran. She is the author of *Monumental Art of the Parthian Period in Iran* (Leiden: 1987; the Persian-language edition 2013), *Ancient Iranian Ceramics from the Arthur M. Sackler Collections* (New York: 1992), and *Breath of Heaven, Breath of Earth: Ancient Near Eastern Art from American Collections* (University of Washington Press, 2013), and numerous articles.

Bo Lawergren is a Professor Emeritus at Hunter College and The Graduate Center of the City University of New York. He has a PhD in Nuclear Physics from The Australian National University, Canberra, but branched into Acoustics and Archaeology of Music 30 years ago. He has written chapters on music for *The Cambridge History of China* (Six Dynasties Period) and *The Oxford Encyclopedia of Ancient Egypt*; and many articles in *Encyclopædia Iranica*, *The New Grove Dictionary of Music and Musicians* (2001), and others.

Florence Malbran-Labat turned to the ancient Near East after her classical studies. Upon entering the CNRS, she oriented her research towards the fields of history, linguistics, and epigraphy and her numerous published works include a 1995 study of Elamite royal inscriptions (*Les inscriptions royales de Suse*). A member of the Archéorient team and the

Mission Archéologique Syro-Française de Ras Shamra-Ougarit, she participated in the publication of texts discovered at Ugarit. She taught Akkadian at the University of Lyon-III, in Madrid in the framework of CSIC, and at the Institut Catholique de Paris, of which she was director. She is currently undertaking the publication of the unpublished texts from the Ville Royale Chantier A of Susa and a re-edition of the Susian contracts published in the 1930s by Vincent Scheil.

Bernadette K. McCall is an honorary affiliate with the Department of Archaeology and the Centre for Classical and Near Eastern Studies of Australia (ANESA) at the University of Sydney where she completed her PhD research on settlement patterns in the southern Zagros Mountains. As a result of investigations in several small valleys that lie between ancient Anshan and Susa, the discovery of undocumented sites with Elamite occupation led to an interest in the role this region played in social and political interaction between lowland and highland populations during the Bronze to Iron Age periods. As well as maintaining interests in the archaeology of southwestern Iran and the associated ceramics, the author also specialises in the study of glass vessels from the Achaemenid to modern periods in Cyprus and the Persian Gulf, and is currently investigating the impact of globalisation on traditional crafts and trading networks in the pre-modern world.

Behzad Mofidi-Nasrabadi studied Archaeology of the Ancient Near East, Assyriology and Cultural Anthropology at the Albert-Ludwigs-University of Freiburg (Germany) graduating with a Master's degree in 1994. He obtained his PhD in 1997 with a thesis on the topic of funerary rites of ancient Mesopotamia in the 1st millennium BC at the Eberhard Karls University of Tübingen (Germany). His habilitation in 2013 at the Johannes Gutenberg-University of Mainz (Germany) dealt with the planning aspects of the official architecture and city structure at Chogha Zanbil. Since 1999 he has been head of archaeological investigations and excavations at Chogha Zanbil and Haft Tappeh.

Oscar White Muscarella received his BA in history at NY (1955) and his PhD in Classical Archaeology under Rodney S. Young in 1965 at the University of Pennsylvania. He obtained a Fullbright in Greece (1958–1959) and later functioned as a Near Eastern archaeologist, digging in Turkey and Iran. He has published four books, edited several more, and written many articles about his excavations as well as on ancient history, artifacts, art, chronologies, and forgeries. He taught history at NY (1960–1964) and then became a curator at the Metropolitan Museum of Art, Department of Ancient Near Eastern Art (1964–2009).

Cameron A. Petrie is Reader in South Asian and Iranian Archaeology, and he is involved with archaeological fieldwork in India, Iran and Pakistan. He has been with the Division of Archaeology in Cambridge since 2005, when he came to Cambridge as the Research Councils

UK Fellow in South Asian and Iranian Archaeology. Prior to that he was the Katherine and Leonard Woolley Junior Research Fellow at Somerville College Oxford (2003–2006), and was appointed to that position after finishing his PhD at the University of Sydney (1998–2002).

Luca Peyronel is Associate Professor of Near Eastern Archaeology and Art History at University IULM of Milan. He has been Director of the Italian Archaeological Expedition in the Erbil Plain, Kurdistan, Iraq since 2013 and carried out excavations at Ebla and Tell Tuqan in Syria since 1991. He is director of ArcheoFrame, the Lab of communication and enhancement of cultural heritage of the University IULM and editor in chief of *Archeostorie. Journal of Public Archaeology*. Author of four books and more than 80 scientific articles on the history and archaeology of the Ancient Near East, his main interests include ancient economics, craft and technologies in the Near East, and cultural interactions and commerce in the Persian Gulf, Iran and Mesopotamia.

Holly Pittman is Bok Family Professor in the Humanities and Professor of History of Art at the University of Pennsylvania, and Curator, Near East Section, Penn Museum. She has published on the art and archaeology of ancient Iran as well as more broadly on the glyptic and other arts of the Ancient Near East. She has excavated across the Middle East, and is currently engaged with ongoing projects at Konar Sandal South in southeastern Iran, Arslantepe in eastern Turkey, and al Hiba (ancient Lagash) in southern Iraq.

Daniel T. Potts is Professor of Ancient Near Eastern Archaeology and History at the Institute for the Study of the Ancient World (New York University). His interest in Elam dates to the very beginning of his studies and has grown over the years. As a contributor to the fields of Iranian archaeology and history, he has written on a wide range of topics, extending chronologically from prehistory through the recent past. He has excavated in both southeastern and southwestern Iran and is currently preparing a book on the northwest Iranian Zagros and the interactions of its ancient populations with their neighbors to the north and west.

Enrique Quintana specializes in the study of Sumerian, Akkadian, Elamite, and Egyptian languages and is a regular collaborator with the Instituto del Próximo Oriente (IPOA) at the University of Murcia. One of his core interests is the advancement of Elamite culture and language. In addition to directing the website of the IPOA, dedicated to the dissemination of the textual documentation of Elam, he is the author of numerous publications, including two volumes on Elamite language and civilization published by the University of Murcia.

Shahrokh Razmjou received his BA and MA in Archaeology in Tehran and his PhD at the University of London. He established the Tablets Hall (1998–1999) and the Centre for

Achaemenid Studies (2001) at the National Museum of Iran and was curator of Ancient Iran in the British Museum (2009–2012). He has directed excavations in the Niasar caves in Kashan. His main areas of research are the architecture, art and archaeology of the Persian Empire, Persepolis, Elamite cuneiform texts, and Assyrian reliefs. Razmjou also produced a new, updated translation of the Cyrus Cylinder into Persian. He is currently teaching at the Department of Archaeology, University of Tehran.

Adriano V. Rossi has been Professor of Iranian philology at “L’Orientale” University of Naples since 1980. He was formed as an Iranologist and Assyriologist at the Sapienza University, Rome, and since 1998 has directed six research projects of relevant national interest (PRIN) on Iranian philology and Achaemenid studies as principal investigator. His main research subjects (with about 200 publications) are historical and descriptive linguistics (Old Persian, Elamite, Parthian, Middle Persian, Sogdian, Kurdish, Balochi, Farsi, Urdu, Indo-European), ethnolinguistics (general and applied to Indo-Iranian languages), Balochi and Brahui lexicography, and the political history of the Indian Subcontinent. Since 2002 he has been project leader of DARIOSH (Digital Achaemenid Royal Inscriptions Open Schema), an international project for the digital edition of the Achaemenid royal inscriptions in Old Persian, Elamite, and Babylonian. Since 2016 he has been president of ISMEO (International Association of Studies on the Mediterranean and the Orient, Rome).

Denise Schmandt-Besserat is Professor Emerita of Art and Middle Eastern Studies at the University of Texas at Austin. Her last book, *When Writing Met Art* (2007), analyzes the impact of literacy on the visual arts. Her work on the nature of information management and on the origin of counting and writing is based on extensive research on archaeological collections in all major museums of the Middle East, Europe and the USA. Her publications include *Before Writing* (1992) and *How Writing Came About* (1996). The latter was listed in *American Scientist* as “one of the hundred books that shaped science in the twentieth century.”

Piotr Steinkeller is Professor of Assyriology in the Department of Near Eastern Languages and Civilizations at Harvard University. Following his undergraduate work at Warsaw University (Mediterranean archaeology and Assyriology), he studied at the University of Chicago, where he received, in 1977, a PhD in Assyriology. Since 1981 he has taught at Harvard University. His research focuses on Mesopotamia during the third millennium BC, in particular, socio-economic history, historical geography of Mesopotamia, Iran, and the Persian Gulf, Mesopotamian religion, and history of early cuneiform writing. He has written five books and over 140 articles and book reviews.

Jan Tavernier (born 1971) is Professor of Ancient Near Eastern Studies at the Université catholique de Louvain (Louvain-la-Neuve, Belgium). In 2002 he defended his PhD at the

Katholieke Universiteit Leuven (Leuven, Belgium) on Iranian proper names and loanwords in non-Iranian texts from the Achaemenid period. His research is concentrated on three axes: (1) Old Persian and Elamite languages and linguistic history, (2) Ancient Near Eastern onomastics, especially Akkadian, Old Iranian and Lycian, and (3) the interaction between language and administration in the Achaemenid Empire. He has published a lexicon of Iranian names in non-Iranian texts from the Achaemenid period and various articles on these research topics.

Massimo Vidale teaches Near Eastern Archaeology and Archaeology of Craft production at the Department of Cultural Heritage of the University of Padua (Italy). He is a member of ISMEO and has carried out archaeological and ethnoarchaeological projects in various countries, including Iran, Iraq, Pakistan, Turkmenistan, and India. His main research interests are the reconstruction of ancient technologies and their impact in the development of early states and civilizations of southern Eurasia. He is currently involved in field research in the Swat valley (Pakistan), focused on the late Bronze age settlements and graveyards of the region, and in Iran, particularly in the Halil Rud valley and in the Jazmurian basin (collaborations with the Universities of Tehran and Jiroft and with the Museum of Zahedan, Sistan-Baluchistan).

Yasmina Wicks completed her PhD “‘Alas, Short is the Joy of Life!’: *Elamite Funerary Practice in the First Half of the First Millennium BCE*” (2017) at the University of Sydney, Australia, where she remains a research affiliate. She has authored a monograph *Bronze ‘Bathtub’ Coffins in the Context of 8th–6th Century BC Babylonian, Assyrian and Elamite Funerary Practices* (2015) and several articles on the material culture of first millennium Elam.

Ran Zadok was born in 1944, studied in Tel Aviv, Jerusalem, and Cambridge (UK), participated in the TAVO (Tübinger Atlas) and the *Iranisches Personennamenbuch* (Vienna) projects, and is now Professor Emeritus of Mesopotamian, Iranian, and Judaic studies at Tel Aviv University, Institute of Archaeology. He has authored numerous books and articles about the ethno-linguistic character and historical geography of the pre-Hellenistic Fertile Crescent and Iran, and published Neo- and Late-Babylonian economic texts.

Introduction

Javier Álvarez-Mon, Gian Pietro Basello, and Yasmina Wicks

Suddenly, to the south, appeared the tell of Susa, an artificial hill with ravines rising like a mass in the distance. The sky was dark, filled with heavy, black, clouds; but a beam of light, just one, passing through the clouds, struck the ruins of the capital of Elam, making them shine like a star against a background of lead. It was a happy omen, and in spite of my complete detachment from superstition I could not help thinking of the future.

Mémoires de Jacques de Morgan 1857–1924 (1997)

The word *civilization* takes us back, etymologically speaking, to a phase in the development of human society that was characterized by the domestication of plants and animals, and in many places a related phenomenon of settlement (Latin *cīvis* from proto-Indo-European *key-*, “to lie down, settle, home, family”) and, ultimately, the emergence of complex societies. Along the Nile river valley and on the alluvial plains of Mesopotamia and southwest Iran, these new lifeways generated a “big bang” in human interaction which in turn stimulated the development of social structures, beliefs, and the cognitive space (and boundaries) that have been largely inherited by modern societies. Among the civilizations to participate in this phenomenon of contact and interchange, Elam has remained one of the most obscure.

The vital and dynamic Elamite civilization inhabited a territory extending from the lowlands of Khuzestan in southwest Iran into the highlands of Fars further to the east, although as the various chapters in this volume reveal its cultural boundaries and broader sphere of influence were subject to significant fluctuation over time. At around 2600 BC Sumerian written sources first alert us to the existence of Elam, which is referred to using the sign NIM, meaning “high, elevated”. Akkadian language would later render NIM as *Elamtu*, possibly related to akkadian *elûm* “high, upper” but most likely deriving from the Elamite word *ha(l)tamti*, perhaps meaning “gracious lord-land” or simply “high land”. The modern name “Elam”, like many other places regarded as Biblical lands in the Western tradition, is an adaptation of Biblical Hebrew (*Êlām*) from which the Greek (*Ailam*) is derived.

The origins of Elamite culture can be traced back much further in time than its first historical attestations to the foundation of the large city of Susa out on the Susiana plain in ca. 4200 BC and, as the reader will note, some authors have incorporated discussion of “Elam” in

its earlier manifestations. At the other end of the chronological spectrum, it is equally difficult to pinpoint when Elam ceased to exist. For a long time its demise was thought to have been an immediate consequence of the brutal sack of Susa by the Neo-Assyrian army of Ashurbanipal in ca. 647 BC, but in recent decades the date has shifted down and today the rise of the Persian empire in the mid-6th century is usually taken as the most relevant marker. In any case, it has been recognised that even centuries beyond this date, we can still bear witness to various manifestations of Elam and the Elamites.¹

Despite having been an integral player in the history of the ancient Near East for thousands of years, the Elamite civilization has tended to languish in the background of scholarly inquiry. The reasons for this are manifold. In particular, its study is highly problematic from both a textual and archaeological viewpoint. From the perspective of the philologist, the Elamite language, with no effective relatives, is inherently difficult and has presented insurmountable challenges for even the most dedicated scholars who have attempted to master it. The archaeologist, meanwhile, must contend with a large, and in many respects still incomprehensible, body of Elamite material culture that mostly originates from the large lowland tell of Susa. This site was excavated intensively in the late 19th and early 20th centuries using methods of recovery and recording that were poor even by the standards of the time. Furthermore, the efforts to publish the material too often resulted in only preliminary reports offering selective and laconic descriptions of the finds. Further complicating matters for the archaeologist, art historian, and even the philologist (where inscriptions are involved) is the integration into Elam's material record of forgeries with manufactured histories. This problem is not new; having been noted by Joachim Menant as far back as 1888, it seems to have arisen already during the late 19th-century excavations of Susa led by Marcel Dieulafoy.

Apart from these more practical concerns, certain attitudes towards Elam have undoubtedly contributed to its failure to attract wider scholarly and public interest. Firstly, due to its geographical position, scholars of the Western tradition have been inclined to conceive of Elam as residing on the periphery of important developments, particularly the invention of writing, that transpired on the alluvial plains of southern Mesopotamia, “the cradle of civilization”. Secondly, the impact of culture historical studies, particularly prior to World War II, which traced the diffusion of the Aryan “race” out onto the Iranian plateau, cannot be underestimated. The now-deeply embedded notion of an “Aryan” Iranian national identity fostered by these studies, and an accompanying discourse tracing the lineage of modern Iranians back to an Aryan Persian empire,² has left little room for consideration of Persia's “native” Elamite predecessors. Finally, and perhaps most importantly, is the heavy toll of the 1979 Iranian revolution on the field of Elamite studies, which is still recovering from the consequent dramatic reduction of archaeological research and the teaching of Elamite language, art, and archaeology in higher learning institutions.

In the preface to a recent second edition of his classic work on Elam, D.T. Potts (2016) cautioned that “the study of Elam may not be long for this world if cogent, readable syntheses are not available”. Precisely this problem incited the editors of *The Elamite World* to attempt to assemble a large group of international scholars to contribute their expertise to the production of a solid treatment of Elamite civilization in the English language, covering topics such as its physical setting, historical development, languages and people, material culture, art, science, religion, and society, as well as the legacy of Elam in the Persian empire and its presence in the modern world. Since the exposure of the anglophone student to Elam has been somewhat limited by the publication of a significant portion of the primary and secondary scholarship in French and, to a lesser degree, in German, a substantial effort has been made to bring some of the best non-English scholarship to a broader audience, in some cases necessitating the translation of contributions into English.

Had this book been written before the 20th century, the reader would have encountered a very different kind of Elam. In *Part I: Imagining Elam*, Daniel T. Potts draws on an extraordinary range of sources to explore the scope of earlier understandings of Elam, reaching back to the Renaissance and perceived through the lenses of Biblical, Classical, cuneiform, and late Antique literature. The Elam encountered in the Bible is then examined in greater depth by Peter Dubovský. The recovery of Elam from the archaeological record goes back to 1897 with the creation of the French scientific delegation in Persia (*Délégation scientifique française en Perse*) and the commencement of its first excavations at Susa. Nicole Chevalier takes us on a fascinating journey into the French archaeological missions, introducing their directors, goals, and methods, which have together left deep imprints on our comprehension of the history of Elam. Because the French missions managed to secure preferential access to Elamite sites, the Louvre museum in Paris acquired, over a number of years, the most important collection of Elamite artefacts outside Iran. Documentation pertaining to the acquisition and presentation of this collection are fundamental sources for the reconstruction of the history of research on Elam and provide interesting reflections on taste in 19th- and early 20th-century France. From these sources Marianne Cotty reconstructs the history of the Louvre collection and the “Elam invented on the banks of the Seine”, highlighting the manifold challenges involved in the museographic presentation of Elam and the mutable criteria used to bring it to life in public exhibit. Turning to a darker aspect of the collecting and exploitation of artefacts from the past, Oscar W. Muscarella outlines some of the problems that have been introduced into the study of Elamite material culture by the antiquities market and identifies a handful of purported “Elamite” objects in collections around the world that should be regarded as fakes.

Incorporating both lowland alluvial plains and a large expanse of the Zagros highlands, intermountain valleys, and piedmonts, Elam’s landscape differed substantially from those in which the Egyptian and Mesopotamian civilizations arose. In *Part II: The Land and Peoples of*

Elam, the unique physical geography and environment that shaped Elam's distinctive dual highland-lowland cultural personality and enabled its remarkable resilience and longevity is presented by Cameron Petrie, Morteza Djamali, and Matthew D. Jones. The natural resources supplied by this landscape, including hard timber, quality stone, and above all, metal, gave Elam an economic edge over its neighbours. The latter is treated in detail by Barbara Helwing, who draws on the latest research to examine metal sources, the mechanics of raw material supply, and Elam's spectacular metallurgical industry. Textual evidence reveals that the diverse regions of Elam were home to multi-ethnic and multilingual populations. A diachronic presentation of the onomastic evidence for the inhabitants of Elam by Ran Zadok suggests the presence of not only Elamites, but Akkadians, later Arameo-Arabians, smaller groups like the Kassites, and in the 1st millennium numerous workers from all over the empire in Achaemenid Elam. Jan Tavernier then homes in on the Elamite and Iranian populations residing in southwest Iran in the 1st millennium and the evidence for their increasing enmeshment. He highlights that in the earlier half of the millennium (c. 1000–550 BC) Iranians were living as subjects in an Elamite-controlled kingdom, but by the Achaemenid period (c. 550–330 BC), after a long period of acculturation, an Elamo-Iranian culture had become dominant.

In *Part III: Elam through History*, Piotr Steinkeller embarks on the first steps of our chronological odyssey with the birth of “Elam”, reconstructing the early historical phase of Elam based on the testimony of predominantly Mesopotamian written sources of the last quarter of the 3rd millennium. He pays particular attention to the genesis of Elam and native Iranian manifestations of statehood such as the kingdoms of Awan and Shimashki, and the “empire” of Puzur-Inshushinak. For the first half of the 2nd millennium the written sources provide complementary perspectives on the role of Elam in trade, diplomacy, and military confrontations with Mesopotamia, and Luca Peyronel draws on these to provide historical meaning to an otherwise scattered wealth of archaeological evidence. Moving into the second half of the millennium, Behzad Mofidi-Nasrabadi reviews the textual and archaeological evidence for the Middle Elamite period and articulates some important new insights gained during his recent excavations at Haft Tappeh and Chogha Zanbil. Elynn Gorris and Yasmina Wicks then continue the story of Elam into the 1st millennium, a time of increasing cultural diversity and political vitality culminating in the rise of the Achaemenid Persian empire.

Proceeding from this chronological outline, the relations between the Elamites and some of their most immediate neighbours are explored in *Part IV: Close Encounters on the Eastern and Western Fronts*. Massimo Vidale begins on the eastern front in the 3rd millennium BC, examining the dynamic exchange networks established between the various Elamite polities and the centers of power in the eastern part of the Iranian Plateau within a context of continuously evolving levels of interaction. On the western front, the long and fascinating history of contact between Elam and its neighbours on the alluvial plains of southern

Mesopotamia presents numerous possible avenues of research. Here Ran Zadok concentrates on three centuries of particularly intensive interaction during which Elam was under Ighalkid and then Shutrukid rule, and Babylonia under Kassite rule (c. 1400–1100). Peter Dubovský then shifts our attention to the north and the often-antagonistic relations between Assyria and Elam in the 1st millennium when the Assyrian kings began attempting to expand their influence over territories in the western Zagros and southern Babylonia, inevitably clashing with Elamite interests. As a major political force of the mid-7th century, Elam was assigned a special place in Assyrian palace reliefs, especially in those commissioned by Ashurbanipal (668–c. 627). A study of this king's representation of the Elamites by Shahrokh Razmjou unveils new insights into Assyrian propaganda, symbolism, and attitudes.

Since long before the emergence of “Elam”, the plain of southwest Iran served as a laboratory for the cultivation of writing. The fascinating history of this evolution provides the focus of *Part V: Language and Writing in Elam*. Denise Schmandt-Besserat begins by exploring the development of administrative technologies required for the management of a redistribution economy: namely, tokens for counting and seals for controlling the movement of goods. The origins of a proto-Elamite writing system are then traced by Jacob Dahl back to these administrative artefacts, which are regarded as forerunners to writing, in the so-called Uruk V period, and to the earliest proto-cuneiform texts of the Uruk IVa period (3500–3300 BC), showing at the same time the independent development of proto-Elamite. Despite the largely undeciphered state of proto-Elamite writing, the content of many of the texts is understood, offering a rich source of information on aspects of social and economic life and intellectual advances made at this time. Another undeciphered writing system used slightly later in Elam, during the second half of the 3rd and early 2nd millennium BC, is linear Elamite. The available information and main hypotheses regarding this enigmatic writing are evaluated by François Desset. Elamite language is not attested epigraphically with certainty until the 23rd century. In a comprehensive chapter, Jan Tavernier provides a background to the history of research on this isolated language, enumerates the extant texts, and then offers a general introduction to Elamite grammar. Subsequently, the use of all three types of writing – proto-Elamite, linear Elamite, and Elamite – in Elam is reviewed by Jean-Jacques Glassner, who places their invention in the context of major cultural phenomena akin to the invention of writing in other areas of the world (Sumer, Egypt, China, and Mesoamerica). Elamite kings utilized the medium of writing to proclaim and preserve eternal memory of their piety and achievements, and to manage affairs within their realm. In an examination of the unique literary genre of commemorative royal inscriptions, Florence Malbran-Labat sheds light on the nature of royal power in Elam, while Gian Pietro Basello and Grazia Giovino analyze the use of writing as an administrative device by the Elamite state.

Moving from texts to archaeology, *Part VI: The Material Culture of Elam* delves into the material remains of the Elamite world, whose architects and artisans masterfully manipulated

clay, siliceous paste, stone, bitumen, ivory, and metal, exhibiting the various facets of their lowland-highland cultural identities. The characteristics of Elamite architecture are studied by Behzad Mofidi-Nasrabadi from the particular perspective of 2nd millennium evidence, which has delivered a broad range of functional types, including residences, public buildings, fortifications, funerary constructions, and sacral structures. Ceramics are, of course, the most abundant materials in the archaeological record, and in them we can perceive an extraordinary artistic production. Bernadette McCall highlights that while the origins of Elamite ceramics have yet to be clarified, their characteristic style and ware would eventually make them a distinctive and consistent corpus of vessels. Another prolific industry, whose raw sources and production techniques were examined in *Part II*, is that of the metal arts. François Bridey considers the importance, in both number and quality, of the discoveries delivered by the site of Susa, which remain the major references for determining the technological milestones and typological and stylistic developments achieved by metalworkers of southwest Iran. Turning then to the equally remarkable vitreous materials industry, Noëmi Daucé examines a period of effervescence and technological innovation commencing in the second half of the 2nd millennium. From both a geographical and chronological point of view, glazed architectural decoration, votive objects, and grave goods outline the contours of a coherent Elamite civilization, whose recipes and *savoir faire* were passed down within workshops for over a millennium. In a dual treatment of sculpture, Holly Pittman first introduces the reader to the birth of Elamite monumental sculpture in light of the sculptural conventions of the time, and then Javier Álvarez-Mon offers a long-term view of the evolution of sculptural craft at a range of scales, from the miniature to the monumental. The study of the rich corpus of Elamite glyptic is shared between two authors. Enrico Ascalone first examines 4th–2nd millennium seals with emphasis on dynamic networks of influence, and Mark B. Garrison then queries the 1st millennium glyptic corpora from Susa, which exhibits many linkages in style, themes, and compositional formulae with glyptic from Persepolis. Dating to the reign of Darius I, the latter reflects the complex emergence of an Achaemenid Persian identity, what has become known as the “*ethnogénèse des Perses*”. Finally, the rich corpus of Elamite visual evidence forms the basis of an original study of the characteristics and evolution of Elamite clothing by Trudy Kawami.

The previous chapters reveal that the diversity and distinctiveness of Elamite society is ubiquitous in its texts, its artistic production, and many other aspects of its material culture. In *Part VII: Elamite Society* the authors draw on this evidence to further bring to life the people of the Elamite world. Gian Pietro Basello and Enrico Ascalone deal with literary production, timekeeping, and metrology. Progressing more into the transcendental, Enrique Quintana examines the characteristics of Elamite religion and ritual. Since the Susiana region provides most of the evidence for this study, correspondences with Mesopotamian culture are understandably salient, but nevertheless we still find specifically Elamite features, including

divinities (and the specific roles allocated to them), places of worship, and ritual practices. The related topic of funerary practices and beliefs is examined by Hermann Gasche and Steven W. Cole, who evaluate the archaeological evidence within the broader territorial and cultural scope of “Greater Elam”, extending from the Iran-Iraq border to Kerman province. The topic of gender has attracted increasing interest in ancient Near Eastern scholarship in recent years, and here Aurelie Daems tackles the subject of Elamite women, providing insights into their representation, social status, and the activities they performed. Despite the ethereal character of music, its millenary tradition in Elam surfaces in the visual record studied by Bo Lawergren, who takes us back to some of the earliest representations of musical ensembles and highlights the significant role of music in Elamite society and its special place in ritual practice.

In recent years an increasing body of academic publications have suggested that the legacy of Elam was more considerable and long-lasting than previously estimated. A recognition of this fact must now be regarded as essential for any scholar interested in the genesis and development of Achaemenid Persia and later Iranian civilizations. In *Part VIII: The Legacy of Elam*, Wouter F.M. Henkelman treats this topic from the perspective of administration and religion, and Javier Álvarez-Mon offers a synthesis of the Elamite architectural and sculptural artistic heritage of Persia. To conclude the volume, Adriano Rossi elaborates on the past, present, and future role of Elam in the development of Iranian studies and in our understanding of the origins of the Achaemenid state.

This volume represents the combined effort of numerous minds seeking for Elam, hardly a household name, a noteworthy place in our shared cultural heritage. The collecting together of their diverse and fascinating contributions into a unifying frame in the Routledge Worlds series offers a fresh way to look at Elam as a cultural phenomenon, and repositions it at the centre of the current panorama of ancient Near Eastern studies. Returning to the optimistic omen of Jacques de Morgan, we would like to carry forth his vision of the beam of light piercing the black clouds over the ancient tell of Susa as an auspicious sign for the future of Elamite studies.

Acknowledgements

The editors would like to acknowledge the financial support of the Australian Research Council (ARC) and of Macquarie University at various stages of this project, without which the volume could not have come to fruition, and the additional assistance of the University of Sydney and “L’Orientale” of Naples. We would also like to thank Matthew Gibbons, Senior Editor at Routledge, for his invitation to edit a book on Elam in the Routledge Worlds series and Lola Harre and Molly Marler for their encouragement and advice along the way. To all the contributors who made the project possible, we thank you for agreeing to partake in this adventure. Finally, we would like to give special mention to Pierre Amiet and François Vallat,

two of the fathers of Elamite studies, whose numerous works are mentioned throughout this volume; to Maurizio Tosi, who accepted our invitation to write a chapter but sadly ended his terrestrial journey before completing it; and to Ernie Haerinck, who worked tirelessly to foster the study of Elam and ancient Iran.

Notes

- [1](#) See especially Potts (2016), who continues his treatment of Elam well into the first millenium AD.
- [2](#) For just one of many of the interesting discussions on this topic, see Matin-asgari 2012.

Bibliography

- Matin-asgari, A. 2012. The Academic Debate on Iranian Identity. Nation and Empire Entangled. In: Amanat, A. and Vejdani, F. (eds.) *Iran Facing Others: Identity Boundaries in a Historical Perspective*. New York: Palgrave Macmillan, 173–192.
- Menant, J. 1888. *Les Fausses antiquités de l'Assyrie et de la Chaldée*. Paris: Ernest Leroux.
- Morgan, J. de. 1997. *Mémoires de Jacques de Morgan 1857–1924. Souvenirs d'un archéologue*, edited by Andrée Jaunay. Paris: L'Harmattan.
- Potts, D.T. 2016. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*, 2nd edition (1st edition 1999). Cambridge: Cambridge University Press.

Part I

Imagining Elam: The history of research and its sources



CHAPTER ONE

Ælam regio

Elam in Western scholarship from the Renaissance to the late 19th century



Daniel T. Potts

Introduction

When Father Jean-Vincent Scheil penned the resonant phrase, ‘Ici commence l’histoire de l’Élam’ in 1900 (Scheil 1900: vii), he was expressing a view which, while understandable, was hardly correct. Western awareness of Elam predated the documentation, excavation and recovery of Elamite inscriptions and monuments *in situ* by many centuries. This chapter surveys the growth of scholarship on Elam broadly speaking in earlier Western scholarship, focusing on the Bible, Classical sources, the trilingual Achaemenid inscriptions, Akkadian and Sumerian texts, the Books of Maccabees, the Babylonian Talmud and eastern Christian (Nestorian) sources, treated, more or less, according to the development of Western interest in them. The commencement of Jacques de Morgan’s excavations at Susa in 1897–1898 provides a convenient cut-off point for this study.

The Bible

Elam’s appearance in Genesis (10.22) as a son of Sem has been widely discussed (e.g. Basnage 1713: 452; Gürtler 1715: 55; Assemani 1728: 419–420; Lenz 1739: 8; Schmidt 1740: 55; Calmet 1776: 39; Löwisohn 1821: 79–80; Hornung 1827: 33; Kitto 1851: 9–10), although as Theodor Nöldeke noted, the classification in Genesis was based on geographical and political relationships, not linguistic or ethnographic criteria (Nöldeke 1899: 1). The publication of the Sixto-Clementine Vulgate in the late 16th century prompted the appearance of exhaustive concordances (e.g. Santo Caro et al. 1733) and detailed commentaries of those books in which

Elam and Shushan feature (e.g. Hardouin 1700: 126–127, Hengstenberg 1848 on Daniel; Patrick 1706: 537, 574, 616, 640, 680, 683, 692, 709, 737–738, 742–745, on Esther and Nehemiah; Nägelsbach 1850: 29–32, 78, 140 on Jeremiah) as well as studies devoted to historical geography (e.g. Wells 1711; Schmidt 1740; Joly 1784; Löwisohn 1821; Hornung 1827). As Elam was a descendant of Sem, Elamite (‘Elamitisch’; Herder 1794: 11) was considered a Semitic language (Kaiser 1840: 1).

Convenient summaries of the Biblical testimony concerning Elam and Shushan were widely disseminated and readily accessible in churches, schools and private homes (e.g. Alexander and Alexander 1830: 18; Allioli 1844: 44–45; Weiland and Ackerman 1845: 6–7; Phillott 1875). Mitchell’s *Ancient Geography* offered the reader ‘questions, to be answered from the Text and the Atlas’ (Mitchell 1845: v) including, ‘1. What is said of Elam? Of Chedorlaomer? What was Elam? 2. What is said of the Elamites by Ezra? By Isaiah? Jeremiah and Ezekiel? Where were Elamites present? 3. What is said of Shushan? What was it once?’ (Mitchell 1845: 192–193).

Chodorlahomor/Chedorlaomer/Kedor Lahomer (Gen. 14.1–17)

The identity and significance of Chodorlahomor/Chedorlaomer/Kedorlaomer, king of the Elamites – *Chodorlahómor rex Aelamitarum* – was frequently discussed (e.g. Ferus 1565: 272; Pereira 1596: 141–143; Ribera 1596: 248; Del-Rio 1608: 227–228; Salian 1619: 398, 418; Basnage 1713: 452; Le Maistre de Saci 1723: 386–389; Suhm 1769: 43; Calmet 1776: 40–41; Jahn 1817: 66; Hornung 1827: 35; Tuch 1847: 164ff; Delattre 1879: 78–79; Harper 1889: 250–251). According to Genesis, Chodorlahomor had, together with Amraphel of Sennaar, Arioch of Pontus and Thadal, ‘king of nations’, waged war against a rebellious group of kings, including Bara of Sodom and Bersa of Gomorrah. Sanson’s dissertations (1717) are noteworthy for their exhaustive discussion of both Biblical and Classical testimony on Elam/Elymais, although Chodorlahomor is not mentioned by Greek and Roman writers (Calmet 1714: xlvi). For centuries he was the earliest Elamite king attested in a written source (Galletti 1827: 2–3), and after the decipherment of cuneiform H.C. Rawlinson proposed that Kudur-Mabuk, whom he had identified in a text published in 1861 (H.C. Rawlinson 1861/I: 2, no. III; earlier mentioned in G. Rawlinson 1860: 73, Note LXXIX, 281; cf. Smith 1868: 116), was none other than Chodorlahomor. Rawlinson quickly modified this, however, suggesting ‘that Kudur-mabuk, and Chedor-laomer, though of one family, were distinct persons’ (G. Rawlinson 1862: 205–206). Whereas the entire historicity of Chodorlahomor was rejected by Nöldeke for lack of evidence (Nöldeke 1869: 159), Oppert opened a new perspective when he suggested that the Greek version of the Biblical name (*Χοδολλάγομορ*) replicated Elamite Kudur-Lagamar (Oppert 1871: 510–511; cf. Oppert 1887: 492), and this was widely accepted (e.g. Lenormant 1877: 538, n. 4; Babelon 1881: 363; Halévy 1887: 321). Eberhard Schrader, a prominent exponent of the use of cuneiform sources to confirm Biblical testimony, suggested that ‘Kedorlaomer’

belonged to an Elamite royal family whose names began with ‘Kudur’ (hence ‘Kudurids’), at least one of whose members had extended its sway as far as Canaan (Schrader 1872: 15–16).

Shushan the palace and Susa

Long before any excavations at Susa, the verse on Elam and Shushan in Daniel (8.2) – ‘And I saw in a vision; and it came to pass, when I saw, that I was at Shushan the palace, which is in the province of Elam; and I saw in a vision, and I was by the river Ulai’ – was vigorously discussed. As early as 1173, Benjamin of Tudela correctly identified Shush (i.e. Susa) with Biblical Shushan, largely because of the alleged tomb of Daniel there and the testimony of Shush’s Jewish community. Printed versions of Benjamin’s travel account circulated from 1543 onwards (in Hebrew [1543], English [1625], Latin [1633], Dutch [1666], and French [1735]; Asher 1840: 1–25), yet Anglophone scholars (e.g. Farr 1850: 61; Booth 1902: 132) typically attributed the identification of Shush with Shushan and Susa to Rennell (Rennell 1800: 203, n. †). Later, confusion was introduced when it was suggested that Shushtar was the site of Greek Susa and Biblical Shushan (e.g. Vincent 1797: 416; Griesinger 1815: 40; Hammer-Purgstall 1825: 335). Although some argued strenuously for the identification of Shush with Greek Susa (e.g. Long 1833: 267), Rawlinson complicated matters by positing that ‘in ancient times there were two cities of the name of Súsan, or Susa, in the province of Susiana – the more ancient, which is the Shushan of Scripture, being situated at Súsan on the Kuran [i.e. Karun river, near Malamir], or Eulæus; the other, the Susa of the Greeks, was at Sús [i.e. Shush], near the Kerkhah, or Choaspes’ (H.C. Rawlinson 1839: 85). This confusion became widespread when Rawlinson’s position was adopted by Ritter (Ritter 1840: 309–311) and promulgated in several major atlases of the period (e.g. Spruner von Merz 1850: Map XIII; see the critique in Menke 1862: 546). Rawlinson, however, had never visited Súsan himself and when Layard finally did, he noted ‘scarcely any remains which would indicate the site of a large city... . no mounds of any size, or columns, or even hewn stones and bricks (Layard 1842: 103–104). Rawlinson’s distinction between Susa and Shushan was roundly criticized (Long *apud* Layard 1842: 104) and eventually disproven by Loftus’ discoveries at Shush (Loftus 1857a: vii; 1857b: 120).

The Book of Tobit

When the King James version of the Bible appeared in 1611, it contained the Book of Tobit in which we read (Tobit II 10), ‘Achiacharus [Ahiqar] did nourish me, until I went into Elymais’ (e.g. Pitman 1822: 615; Lange 1880: 126, 148, 504, 507, 565). According to some scholars, this implied a journey to Susa (Rennell 1800: 403), providing yet another early attestation of the city. The relevant clause appears in the Greek (cf. Meissner 1894: 193) but is absent in the Hebrew, Aramaic (Chaldee) and Vulgate versions, while in the *Vetus Itala* (Old Latin) it is

applied to a different person (Fuller 1888: 193).

Elam and Susiana in the works of the classical authors

The publication of Latin translations of Strabo's *Geography* and Herodotus's *Histories* in 1469 and 1474, respectively, made a vast amount of data on ancient southwestern Iran accessible in Europe from an early date. The totality of Classical testimony on the Persian empire, including Susa, Susiana and the adjacent highlands, had been synthesized by the late 16th century (Brisson 1590). Thereafter, countless studies appeared in which these sources were analyzed (e.g. de Laet 1633: 123ff.; Ferrari 1657; Cellarius 1703; Longuerue 1732: 9ff.; 1784: 26–27; Caylus 1764: 119; Hoeck 1818: 89–97). So familiar were the Biblical and Classical allusions to Susa's fine drinking water that the poet Milton included a reference to it in *Paradise Regained* (Bk. III, verse 288; 'Susa by Choaspes, amber stream/ The drink of none but kings'), published in 1671 (cf. Todd 1809: 177–179). Sixty-five years later the same inspiration prompted Elizabeth Singer Rowe (1674–1737), to write, 'Where fam'd *Coaspes* laves/ Rich *Elam*'s borders with his sacred waves' in *The History of Joseph*, Book 5, l. 1 (Rowe 1744).

Amongst the great Enlightenment geographers who treated the sources on Elymais, and whose works were widely read and translated, particular mention should be made of Bourguignon d'Anville (e.g. d'Anville 1791: 484–486) and Konrad Mannert (Mannert 1797: 486). School atlases and geographical surveys with detailed information on Susiana, Elymais, Kissia and related regions in the area of ancient Elam abounded (Arrowsmith 1832: 230; Laurent 1840: 280–281; Ritter 1840). Some of these provided detailed concordances of toponyms and hydronyms (e.g. Anonymous 1837; Ideler 1841; Müller 1849), while others were more synthetic (e.g. Menke 1862; Nöldeke 1874; von Gutschmid 1888). Nor should we forget that European cartographers began publishing maps and historical atlases showing territories of the Persian Empire with the toponyms attested in Classical sources from an early date (e.g. Moullart – Sanson 1721; Santini 1779; Spruner von Merz 1850; Kiepert 1854).

The achaemenid trilingual inscriptions

The identification of one of the languages – the second – in the Achaemenid trilingual inscriptions as Elamite was preceded by a long period of speculation and analysis. Although several 17th and early 18th century visitors to Persepolis (e.g. Samuel Flower, Jean Chardin, Cornelis de Bruijn) made and published hand copies of individual cuneiform signs and inscriptions, none of these was accurate enough to form a basis for serious study. Consequently, some scholars thought the cuneiform inscriptions engraved on the buildings at Persepolis were not true writing but magic signs (Cuper 1743: 222, 229; Zoëga 1797: 552, n. 5),

or a playful form of decoration (Hyde 1700: 1729; Witte 1799: 83; cf. Sylvestre de Sacy 1793: 3). Such scepticism vanished after Carsten Niebuhr, who worked at Persepolis in March, 1765, published the first accurate copies of a long series of Persepolis texts, noting that the Persepolitan texts were written in three distinct ‘alphabets’ (‘drey ganz verschiedenen Alphabeten’; Niebuhr 1778: 158). Although Niebuhr’s threefold classification was rejected by some (e.g. Wahl 1784: 619), it soon gained acceptance by serious students of cuneiform (e.g. Tychsel 1798: 47; Münter 1802: 83). The three variants were referred to by Münter as A, B and C (Münter 1802: 84) and by Grotefend as first, second and third (‘erste, zweyte und dritte Schriftart’, as reported by Tychsel 1802: 1482; cf. Sylvestre de Sacy 1803: 457; Grotefend 1805: 944). Grotefend was the first to observe that, when trilingual inscriptions flanked a window, the first and least complex variant was always at the top; the second variant, of intermediate complexity (Niebuhr’s texts C, E, K, D, F and L; Ménant 1885: 77 discussed F as an example of the type), was at the left; and the third, most complex variant was at the bottom or right (Grotefend 1805: 936; cf. Bellino 1820: 172; Ouseley 1821: 257; Rich 1839: 252; Ménant 1885: 82).

Scholars then turned to the identity of the languages represented by these three writing systems. Münter suggested that they were Zend (Avestan), Pahlavi and Parsi (Persian), written alphabetically, syllabically and ideographically (Münter 1802: 74, 84), while Lichtenstein identified them as Median or Zend, Pahlavi and Babylonian, (Lichtenstein 1803: 72, 89, 103) and Grotefend suggested they were Zend, Pahlavi and an unidentified Persian dialect (‘Persischen Mundart’; Grotefend 1805: 936). Later he called them all ‘altpersisch’, though not necessarily Zend, Pahlavi and Parsi (Grotefend 1837: 24).

In 1823 Antoine-Jean Saint-Martin identified the language of the second type of Persepolitan inscriptions as Median (‘médique’) (Saint-Martin 1823: first unnumbered figure; 1836: 119; cf. Beer 1838: 5; Salisbury 1849: 520; de Saulcy 1849; Luzzatto 1850: 9; rejected by Lassen 1842: 358–359). Westergaard (1845: 340) concurred in identifying the second variant as ‘Median’ (‘Medisch’) on geographical grounds and endorsed the term as a means of distinguishing it from the first variant, which he considered Old Persian (‘Altpersisch’), while the third he called Susian (‘Susisch’), stressing, however, that the first and second might be simply local variants of Assyrian and Babylonian. Although Hincks preferred to use I and II for ‘the first and second kind of Persepolitan writing’ since ‘the terms Persian or Median ... assume facts that are very questionable’ (Hincks 1846a: 115), he expressed no doubt that these attributions were correct and sometimes wrote of ‘the second or Median kind of writing’ (Hincks 1846b: 240).

A new hypothesis was announced in 1848 by Rawlinson who suggested that the ‘so-called Median alphabet’ differed from Babylonian in orthography and structure, resembling ‘more nearly to a Scythic ... character’ (H.C. Rawlinson 1848: 34; cf. 1851: xlvi, xlix, l, lii, lxxxviii). Speculating that any ‘departure from that type’ had resulted from ‘intercourse with Arian or Semitic nations’, he suggested that ‘we must reject the possible attribution to the Medes of the

centre columns of the trilingual tablets' and 'admit the possible Scythicism of the original speech of the Medic race' (H.C. Rawlinson 1848: 37). This hypothesis attracted some significant adherents (e.g. Norris 1853; Westergaard 1854).

De Saulcy's 1849 treatise on cuneiform inscriptions '*du système Médique*' (de Saulcy 1849) prompted a letter, dated 5 November 1849, from the Austrian polymath Isidore Löwenstern, in which the writer rejected the Median identification of the second system of cuneiform at Persepolis (Löwenstern 1850a). This was followed by an exposition of his alternative hypothesis, namely, that the language of these inscriptions was Elamite. As Löwenstern wrote of his title ('*Remarques sur la deuxième écriture cunéiforme de Persépolis*'), 'if it were the fashion nowadays to employ the less reserved style of scholars of the last century, I would have changed my title to: *Memoir demonstrating that the second script of Persepolis, called Median, is that of the primitive inhabitants of Persia, the Elamites*' (Löwenstern 1850b: 687). While admitting that the Elamites were a people shrouded in obscurity, Löwenstern nonetheless thought it unlikely their language was Scythic (Löwenstern 1850b: 689) and, because of the Biblical association of Elam and Sem, maintained that Elamite was a Semitic language (Löwenstern 1853: 85).

As early as 1839 Rawlinson had referred to cuneiform inscriptions at Shikaf-e Salman (H.C. Rawlinson 1839: 84; cf. 1848: 28). In 1850 he coined the name 'Elymaean' for these texts. Written 'in a variety of the Assyrian character', they appeared 'in Elymais proper, and ... in all probability ... record the actions of provincial governors, or of kings tributary to Susa... . The character of these inscriptions is sensibly modified from the Assyrian and Babylonian type, and varies equally much from the character employed at the neighbouring city of Susa, yet it is not very difficult to be deciphered, and if the language were only approximately known, the general contents of the legends might be discovered. I can make nothing, however, of the language. It appears to me to be Scythic, rather than Semitic or Indo-European, but the materials are too scanty to afford grounds for any trustworthy analysis' (H.C. Rawlinson 1850: 482–483).

In 1851 Layard published copies of two Kul-e Farah inscriptions (Layard 1851: 36–37), and Holtzmann noted that, if Rawlinson (Rawlinson 1839: 84; 1848: 27–28; 1850: 407) and Hincks were correct about the similarities between these texts and those of the second type at Persepolis and Bisotun, then the distribution of the type was far greater than previously assumed (Holtzmann 1851: 148). Notwithstanding speculation over the Scythic or Elamite character of the texts, Holtzmann continued to call them Median, noting, however, that the term was merely a convenience that had been standard since Westergaard's study of 1845 (he omitted any reference to Saint-Martin), while stressing that the inscriptions were neither limited to Media geographically nor confirmed linguistically as Median (cf. Longpérier 1845: 448).

Two years later Norris observed that 'the only peculiar name found attached to any place or

province of Persia is the one attributed to Susiana; every other name is rendered by a Persian word' (Norris 1853: 4). A similar line of thinking led Mordtmann to identify the Median or Scythic inscriptions as Susian ('susisch) because he felt that the recurring order at the head of Achaemenid satrapal lists – Persia, Susiana, Babylonia – mirrored the three languages of the inscriptions (Mordtmann 1862: 22; 1870). Perceived analogies with Turkish suggested that Susian belonged to the Turkic-Tatar language family, and was one of the oldest Turkic languages (Mordtmann 1862: 32–33).

In 1863 Jules Oppert used 'Susian or Elamite' ('susiens ou élamites') to describe names (actually Kassite) in a kinglist which he had identified in the British Museum in 1862 (Oppert 1863: 275). Two decades later Oppert described the identification and publication of this text as the 'discovery' of the language of the Elamites (Oppert 1884, 1885: 45–46) and vehemently defended the priority of his discovery in a sharp critique of Delitzsch (see below). Importantly, Oppert distinguished Susian – the language of an early royal dynasty attested in pre-Achaemenid inscriptions at Susa and in the British Museum text – from Median, the language of the Medes (from Deioces onward), the 'Suso-Medes' and the second language of the Achaemenid inscriptions (Oppert 1863: 45–46; cf. 1876b, 1877/8). At the International Congress of Orientalists held in Paris in 1873, Oppert presented a paper on inscriptions in the Susian language, and amongst other things, suggested that the names of the rulers of the XXIIth Dynasty (misprinted as XIIth but correct in Oppert 1885: 46) in Egypt named by Manetho, beginning with Sesonch (Shoshenq I; d. 924 BC), were all Susian (Oppert 1876a: 183). The term Susian was adopted by Lenormant, who published a tentative Elamite kinglist and family tree based on the Neo-Assyrian sources, beginning with Huban-nikaš I ('Xumba-nigas I') in the reign of Sargon II, as well as line-drawings of brick and stele inscriptions from Susa (nos. 31–55), without transliteration or translation, based on copies by Loftus and squeezes provided by Constantine Macrides, and several fragmentary inscriptions from Liyan ('environs de Bender-Bouschir') using squeezes provided by Lysimaque K. Tavernier, one time French Consul in Baghdad (Lenormant 1874a: 109–141). Lenormant also suggested that Susian belonged to the Turanian language family (Lenormant 1874b: 321–322; Lenormant 1875; in 18th and 19th century scholarship Turan referred broadly to Siberia; see e.g. Mentelle 1773: 558; Turanian was gradually superseded by 'Altaic'; Ujfalvöy de Mezö – Kövsed 1874: 58). He was enthusiastically followed by Sayce (1874, 1884), whose first study, published in the same year as Lenormant's, was intended 'to lay the foundation of future investigations into a subject so fruitful and interesting to the Turanian and general philologist' (Sayce 1874: 466). Sayce maintained that 'the second Akhæmenian language... must have been the vernacular of the lower classes who inhabited the country in which the monuments of the Persian kings were erected – in other words, of the Medes' (Sayce 1874: 466). He believed that it was necessary to distinguish 'Turanian natives' from 'Aryan emigrants' in Media and concluded that 'while fully allowing with the French school that the language of the second Akhæmenian texts belonged

to the aborigines of Media, I prefer to call it Elamite, as less likely to lead to ambiguity and misconception' (Sayce 1874: 467).

The Turanian hypothesis was, however, quickly rejected by Oppert (Oppert 1876b: 4) and Delattre (Delattre 1883a: 18). Moreover, the chronological difference between the earlier inscriptions of Susa and the later ones at Persepolis prompted him to distinguish *Susian* – the language of the pre-Achaemenid Elamite princes who reigned at Susa – from *Susiac* ('susiaque') – the second language of the Achaemenid texts (Delattre 1883a: 18). A decade later Pinches used 'Elamite' without hesitation or explanation (Pinches 1884: 303), whereas Hommel, like Delattre, distinguished two closely related languages: Elamite or Susian, the language of the earlier, pre-Achaemenid, Susa inscriptions, and Median or, as he preferred Anzanite ('Anzanisch'), the language of the second variety of the Achaemenid texts (Hommel 1884: 161).

As noted above, Oppert claimed credit for the 'discovery', in 1862, of the language of the Elamites, by which he meant that of the pre-Achaemenid inscriptions at Susa. The appearance of Delitzsch's *Die Sprache der Kossäer* (Delitzsch 1884) prompted Oppert to announce this claim retrospectively at the same time as he tried to show that Delitzsch was wrong in attributing Elamite to the Kossaeans (Oppert 1884, 1885). The publication of the Cyrus Cylinder in 1880, however, prompted Amiaud to use the term 'Anzanite' (following Hommel 1884) for the 'dialecte élamite, le susien', spoken by the Turanian population of Persia (not the Medes) and used by the Achaemenids in the second variety of their inscriptions to address them (Amiaud 1887: 254; cf. Halévy 1889).

Although a grammar of 'Medic' was published in 1888 (Bertin 1888), Weissbach argued forcefully two years later that the language of the second type was neither Turanian/Scythic nor Median. Emphasizing the differences between the Susa, Malamir (Shikaf-e Salman, Kul-e Farah) and Achaemenid texts, he suggested the terms Old Susian ('Altsusisch') for the earliest texts from Susa, which he considered contemporary with Old Assyrian and Old Babylonian material; Middle Susian (Mittelsusisch') for the Malamir texts, which he considered Neo-Assyrian/Babylonian in date; and New Susian ('neususisch') for the Achaemenid texts of the second variety (Weissbach 1890: 24 and chart p. 26).

Akkadian and Sumerian texts

The decipherment of cuneiform, coupled with the discovery and publication of Assyrian texts from the mid-19th century onwards, opened a window on Elam's history that revolutionized scholarship. If we leave aside de Saulcy's speculative and mistaken reading of the toponym Elam in the titlature used by Sargon II in his Display Inscription at Khorsabad (de Saulcy 1850: 767), it was Hormuzd Rassam's discovery of Assurbanipal's library in the North Palace at Nineveh, at the end of 1853, that had the greatest bearing on the recovery of pre-Achaemenid

Elamite history. Suddenly, Assurbanipal's campaigns against Elam sprang to life in works written for both scholars and the general public (e.g. Smith 1871; von Gutschmid 1876; Delitzsch 1884; Amiaud 1884: 252; Haupt 1886). Rawlinson's publication of the Taylor Cylinder from Nineveh (Rawlinson 1861/1866: Pls. 37–42), translations of which appeared in English (Talbot 1862, 1874), French (Ménant 1874) and German (Hoerning 1878), provided important information on Sennacherib's Elamite campaigns (cf. Gaffarel 1879: 178, 181; Walker 1888). Beginning in 1889, Bezold's *Catalogue* provided a much needed *vademecum* to the Ninevite corpus. Delitzsch's *Wo lag das Paradies?* (Delitzsch 1881: 320–329) included a comprehensive study of Elam's geography based on the Assyrian and Babylonian sources, while Billerbeck's synoptic history of Susa (Billerbeck 1893) fully exploited the published Assyrian sources.

The Cyrus and Nabonidus texts

As noted above in reference to the Kul-e Farah inscriptions, Anshan (Anzan) was discussed at some length in 1874 by A.H. Sayce (Sayce 1874: 475). In 1879 Hormuzd Rassam discovered the so-called Cyrus Cylinder at Babylon, and Rawlinson's publication of the text in 1880 (H.C. Rawlinson 1880) prompted vigorous debate, much of which concerned Anshan, its location and its relationship to Elam (e.g. Babelon 1881; Delattre 1883b; de Harlez 1882, 1883; Sayce 1882, 1884, 1886; Halévy 1883; Evers 1884; Amiaud 1887: 241; Hagen 1891; Howorth 1892). In his initial remarks, Rawlinson suggested that Anshan, of which Cyrus was identified as king, 'must be a part of Elam, or immediately adjoining that province', and he located it 'somewhere in the plain of Ram-Hormuz' (H.C. Rawlinson 1880: 77). This debate received additional stimulus from the almost simultaneous publication of the Nabonidus Chronicle (Pinches 1880: 170–171), and it became clear that Anshan and Elam must henceforth be considered in tandem.

The inscriptions of Gudea

Ernest de Sarzec's excavations at Telloh in southern Iraq (1877–1881) recovered the well-known inscribed cylinders of Gudea (de Sarzec 1884). These gave the first glimpses of interaction between the city-state of Lagash and Elam in the late 3rd millennium BC (Amiaud 1884). Most importantly, these texts associated Anshan, 'a land of the greatest importance in the history of Western Asiatic civilization, a region which was no doubt the cradle of the Elamite civilization', with Elam (Anonymous 1886/7: 14).

The books of Maccabees

The accounts in I Maccabees 6: 1–17 and II Maccabees 1: 13–17 and 9: 1–4 of Antiochus's IV's

attempted raid on a temple of Nanaya in Elymais were widely discussed by early scholars (e.g. Marracci 1705: 9; Mongez 1799: 238; Buckingham 1830: 491–492; Löwenstern 1850b: 692; Phillott 1875: 24).

The Babylonian Talmud

The Babylonian Talmud contains several references to Elam (Kiddushin 49b = Epstein 1935–1952: 4967; Kiddushin 71b = Epstein 1935–1952: 5041; Pesachim 87a = Epstein 1935–1952: 1736). These references were discussed by Talmudic scholars concerned, amongst other things, with the historical geography of Elam and Susiana (e.g. Neubauer 1868: 325; Hamburger 1883: 61, 168, 734; Berliner 1884: 17).

Nestorian sources

Clearly echoing the terminology used in the Bible, an eparchy of Elam was created in Khuzestan by ‘Abdīšō of Saubā (fl. c. 300) (Braun 1900: 10, n. 4). Sources for the study of Christianity in Elam began to become accessible in the early 18th century (Assemani 1728: 419–420; Pfeiffer 1777: 372, 407, 426, 479, 480, 535, 537, 559, 561, 564, 569, 579), and their study expanded throughout the 19th century (e.g. Zingerle 1836: 53; Hoffmann 1880: 19, 39, 41, 131, 180).

The Chinese controversy

This review would not be complete if mention were not made of Terrien de Lacouperie’s thesis, put forward for the first time in 1880, ‘that the Chinese writing was derived about 2500 BC from that in use at Babylon, through the intermediate country of Elam’ (de Lacouperie 1888a: 313). Lacouperie suggested that, ‘Nakhunte was the traditional name of the kings of Elam, and there are in the early Chinese institutions not a few similarities with those of that country’ (Lacouperie 1888b: 13; cf. 1889). This found little favor amongst Sinologists (e.g. Schlegel 1891).

Conclusion

Despite the fact that the topics addressed earlier have been presented in a quasi-chronological order, it is clear that, in many cases, scholars all over Europe worked simultaneously on many of these subjects. Elam’s roots were thus well established in Europe’s academies by the time

Loftus, let alone de Morgan, opened their trenches at Susa. This is not to deny the revolutionary effect their discoveries had on the history of Elamite scholarship but simply to situate them within the broader intellectual history of Western scholarship on the ancient world.

Abbreviations

BOR	The Babylonian and Oriental Record
CRAIBL	Comptes rendus des séances de l'Académie des Inscriptions et Belles – Lettres
JRAS	Journal of the Royal Asiatic Society of Great Britain and Ireland
JRGS	Journal of the Royal Geographical Society
RA	Revue Archéologique
TRIA	The Transactions of the Royal Irish Academy
ZDMG	Zeitschrift der Deutschen Morgenländischen Gesellschaft

References

- Anonymous. 1837. Ueber Persiens alte Geographie. Aus dem zweyten, ungedruckten Bande von Reichard's Thesaurus. *Anzeige – Blatt für Wissenschaft und Kunst (Jahrbücher der Litteratur)* 77: 1–44.
- . 1886/7. Review of de Sarzec 1884. *BOR* 1: 14–15.
- Alexander, J.W. and Joseph Addison. 1830. *A geography of the Bible: Compiled for the American Sunday School Union*. Philadelphia: American Sunday School Union.
- Allioli, J.F. 1844. *Handbuch der biblischen Alterthumskunde*, vol. 2. Landshut: Vogel'sche Verlagsbuchhandlung.
- Amiaud, A. 1884. L'inscription A de Gudea. *Zeitschrift für Keilschriftforschung* 1: 233–256.
- . 1887. Cyrus, roi de Perse. In: F. Vieweg (ed.) *Mélanges Renier*. Paris, 241–260.
- Arrowsmith, A. 1832. *A Grammar of Ancient Geography, Compiled for the Use of King's College School*. London: Arrowsmith and Fellowes.
- Asher, A. 1840. *The Itinerary of Benjamin of Tudela*, vol. 1. London and Berlin: Asher & Co.
- Assemani, J.S. 1728. *Bibliotheca Orientalis Clementino-Vaticana*, vol. 3/2. Rome: Typis Sacrae Congregationis de Propaganda Fide.
- Babelon, E. 1881. Les inscriptions cunéiformes relatives à la prise de Babylone par Cyrus. *Annales de Philosophie Chrétienne* NS 3: 340–372.
- Basnage, J. 1713. *Antiquités judaïques, ou Remarques critiques sur la République des Hébreux*, vol. 2. Amsterdam: Chez les Frères Chatelain.
- Beer, E.F.F. 1838. Ueber die neuesten Forschungen zur Entzifferung der Keilschrift. *Allgemeine Literatur – Zeitung* (January): 1–47.
- Bellino, C. 1820. Account of the progress made in deciphering cuneiform inscriptions. *Transactions of the Literary Society of*

Bombay 2: 170–193.

- Berliner, A. 1884. *Beiträge zur Geographie und Ethnographie Babyloniens im Talmud und Midrasch*. Berlin: J. Gorzelanczyk & Co.
- Bertin, G. 1888. *Abridged Grammars of the Languages of the Cuneiform Inscriptions, Containing I. – A Sumero-Akkadian Grammar; II. – An Assyro-Babylonian grammar; III – A Vannic Grammar; IV. – A Medic Grammar; V. – An Old Persian Grammar*. London: Trübner & Co.
- Bezold, C. 1889. *Catalogue of the Cuneiform Tablets in the Kouyunjik Collection of the British Museum*, vol. 1. London: Trustees of the British Museum.
- Billerbeck, A. 1893. *Susa: Eine Studie zur alten Geschichte Westasiens*. Leipzig: Hinrichs.
- Booth, A.J. 1902. *The Discovery and Decipherment of the Trilingual Cuneiform Inscriptions*. London: Longmans, Green, and Co.
- Braun, O. 1900. *Das Buch der Synhados oder Synodicon Orientale*. Stuttgart/Vienna: J. Roth.
- Brisson, B. 1590. *De Regio Persarum Principatu, libri tres*. Paris: Steph. Preuosteau.
- Buckingham, J.S. 1830. *Travels in Assyria, Media, and Persia*, 2nd ed., vol. 1. London: Henry Colburn and Richard Bentley.
- Calmet, A. 1714. *Commentaire littéral sur tous les livres de l'Ancien et du Nouveau Testament. Le prophète Isaie*. Paris: Pierre Emery.
- . 1776. *Abhandlung in welcher der Vorzug der hebräischen Geschichte vor den Geschichten aller übrigen Nationen bewiesen wird*. Vienna: Rudolph Gräffer.
- Caylus, A.C. de. 1764. Sur les ruines de Persépolis. *Histoire de l'Académie Royale des Inscriptions et Belles – Lettres* 29: 118–148.
- Cellarius, C. 1703. *De principio regnorum et historiarum dissertatio, qua Ctesiae Cnidii quem plures adhuc Historici sequuntur, De Assyriorum Medorumque, nec non Babyloniorum Regibus sententia examinatur, & vanitatis conuincitur*. Halle: Christoph. Andreæ Zeitleri.
- Cuper, G. 1743. *Lettres de critique, de littérature, d'histoire, &c. écrites à divers savans de l'Europe*. Amsterdam: J. Wetstein.
- d'Anville, J.B.B. 1791. *Compendium of Ancient Geography*, Part 2. London: R. Faulder.
- Delattre, A. 1879. *Les inscriptions historiques de Ninive et de Babylone*. Paris: Ernest Leroux.
- . 1883a. *Le peuple et l'Empire des Mèdes jusqu'à la fin du règne de Cyaxare*. Brussels: F. Hayez.
- . 1883b. Cyrus d'après une nouvelle méthode historique. *Le Muséon* 2: 442–459.
- Delitzsch, F. 1881. *Wo lag das Paradies?* Leipzig: J.C. Hinrichs'sche Buchhandlung.
- . 1884. *Die Sprache der Kossäer. Linguistisch-historische Funde und Fragen*. Leipzig: J.C. Hinrichs'sche Buchhandlung.
- Del – Rio, M. 1608. *Pharus Sacrae Sapientiae, quo quid contineatur pagina sequens docebit*. Lyon: Horace Cardon.
- Epstein, E.I. 1935–1952. *The Babylonian Talmud*. London: Soncino Press.
- Evers, E. 1884. *Das Emporkommen der persischen Macht unter Cyrus (nach den neuentdeckten Inschriften)*. Berlin: R. Gaertners Verlagsbuchhandlung.
- Farr, E. 1850. *History of the Persians*. New York: Robert Carter & Brothers.
- Ferrari, F. 1657. *Lexicon Geographicum*. London: R. Daniel.
- Ferus, J. 1565. *Reverendi patris D. Ioannis Feri, in totam Genesim, non minus eruditae, quam catholicae enarrationes*.

- Louvain: A. Birckmann and F. Böhm.
- Fuller, 1888. Tobit. In: Wace, H. (ed.) *The Holy Bible According to the Authorized Version (A.D. 1611)*, vol. 1. London: John Murray, 149–240.
- Gaffarel, P. 1879. *Histoire ancienne des peuples de l'Orient jusqu'au premier siècle avant notre ère*. Paris: Alphonse Lemerre.
- Galletti, J.G.A. 1827. *Geschichte von Persien*. Gotha: Hennings'sche Buchhandlung.
- Griesinger, G.F. 1815. *Neue Ansicht der Aussäe im Buche Daniel*. Stuttgart/Tübingen: J.G. Cotta'schen Buchhandlung.
- Grotefend, G.F. 1805. Ueber die Erklärung der Keilschriften, und besonders der Inschriften von Persepolis. In: Heeren, A.H.L. (ed.) *Ideen über die Politik, den Verkehr und den Handel, der vornehmsten Völker der alten Welt. Erster Theil, Asiatische Völker. Erste Abtheilung, Einleitung. Perser*, 2nd ed. Göttingen: Vandenhoeck und Ruprecht, 931–958.
- . 1837. *Neue Beiträge zur Erläuterung der persepolitischen Keilschrift nebst einem Anhang über die Vollkommenheit der ersten Art derselben*. Hannover: Verlag des Hahn'schen Hofbuchhandlung.
- Gürtler, N. 1715. *Vocum typico Prophetiarum brevis explicatio*, 2nd ed. Utrecht: Gijsbert van Paddenburg.
- Gutschmid, A. von. 1876. *Neue Beiträge zur Geschichte des Alten Orients. Die Assyriologie in Deutschland*. Leipzig: B.G. Teubner.
- . 1888. *Geschichte Irans und seiner Nachbarländer von Alexander dem Grossen bis zum Untergang der Arsaciden*. Tübingen: H. Laupp'schen Buchhandlung.
- Hagen, O.E. 1891. *Keilschrifturkunden zur Geschichte des Königs Cyrus*. Leipzig: Inaugural – Dissertation, Univ. of Leipzig.
- Halévy, J. 1883. Cyrus et l'origine des Achéménides. *Le Muséon* 2: 43–52, 247–260.
- . 1887. Un fait mentionné dans le XIV^e chapitre de la Genèse. *CRAIBL* 31/3: 320–322.
- . 1889. Le royaume héréditaire de Cyrus d'après les Inscriptions babyloniennes et la Bible. *Revue des Études Juives* 19: 161–178.
- Hamburger, J. 1883. *Real – Encyclopädie für Bibel und Talmud*, part 2. Strelitz: Im Selbstverlag.
- Hammer-Purgstall, J. 1825. Extrait de la traduction faite par M. le Baron de Nerciat d'un Mémoire de M. de Hammer sur la Perse, pour ce qui concerne seulement la partie géographique. *Recueil de Voyages et Mémoires publié par la Société de Géographie* 2: 247–371.
- Hardouin, J. 1700. *Chronologia Veteris Testamenti, ad Vulgatam Versionem exacta, et nummis antiquis illustrata*. Paris: J. Boudot.
- Harlez, C. de. 1882. Même sujet [rejoinder to Sayce 1882]. *Le Muséon* 1: 557–570.
- . 1883. Conclusion. *Le Muséon* 2: 261–268.
- Harper, W.R. 1889. The Pentateuchal question. II. Genesis 12: 6–37:1. *Hebraica* 5/4: 243–291.
- Haupt, P. 1886. The Battle of Halûle, 691 B.C. *The Andover Review* 5: 542–547.
- Hengstenberg, E.W. 1848. *Dissertations on the genuineness of Daniel and the integrity of Zechariah*. Edinburgh: T. & T. Clark.
- Herder, J.G. 1794. *Von der Gabe der Sprachen am ersten christlichen Pfingstfest*. Riga: Johann Friedrich Hartknoch.
- Hincks, E. 1846a. On the First and Second Kinds of Persepolitan Writing. *TRIA* 21: 114–131.
- . 1846b. On the Three Kinds of Persepolitan Writing, and on the Babylonian Lapidary Characters. *TRIA* 21: 233–248.
- Hoeck, C.F.C. 1818. *Veteris Mediae et Persiae Monumenta*. Göttingen: Ruprecht & Vandenhoeck.

- Hoerning, R. 1878. *Das sechseitige Prisma des Sanherib in transcribirtem Grundtext und Uebersetzung nebst Beiträgen zu seiner Erklärung*. Leipzig: Inaugural-Dissertation, Univ. of Leipzig.
- Hoffmann, G. 1880. *Auszüge aus syrischen Akten persischer Märtyrer*. Leipzig: Abhandlungen für die Kunde des Morgenlandes 7/3.
- Holtzmann, A. 1851. Ueber die zweite Art der achämenidischen Keilschrift. *ZDMG* 5: 145–178.
- Hommel, F. 1884. Die sumero – akkadische Sprache und ihre Verwandtschaftsverhältnisse. *Zeitschrift für Keilschriftforschung* 1: 161–178.
- Hornung, D. 1827. *Handbuch zur Erläuterung der biblischen Geschichte und Geographie für Volksschulen und forschende Bibelleser mit besonderer Rücksicht auf die von dem Verfasser herausgegebene Biblische Geschichtskarte*, 2nd ed. Leipzig: Friedrich Fleischer.
- Howorth, H.H. 1892. The Beginnings of Persian History. *JRAS for 1892*: 372–375.
- Hyde, T. 1700. *Historia religionis veterum Persarum, eorumque magorum*. Oxford: Sheldonian Theater.
- Ideler, J.L. 1841. *Namen – und Sach – Verzeichniß zu Carl Ritter's Erdkunde von Asien*, vol. 1. Berlin: G. Reimer.
- Jahn, J. 1817. *Biblische Archäologie. 1. Theil. Häusliche Alterthümer. 1. Band*, 2nd ed. Vienna: Carl Ferdinand Beck.
- Joly, J.-R. 1784. *La Géographie sacrée, et les Monuments de l'Histoire sainte*. Paris: Alexandre Jombert.
- Kaiser, G.P.C. 1840. *Die Ursprache oder über eine Behauptung Mosis, daß alle Sprachen der Welt von einer einzigen der noachischen abstammen mit einigen Anhängen*. Erlangen: Palm'schen Verlagsbuchhandlung.
- Kiepert, H. 1854. *Atlas von Asien*. Berlin: Dietrich Reimer.
- Kitto, J. 1851. *The People of Persia*. London: The Religious Tract Society.
- Lacouperie, T. de. 1888a. The Babylonian Origin of the Chinese Characters. *JRAS NS* 20/2: 313–315.
- . 1888b. *The Old Babylonian Characters and Their Chinese Derivates*. London: BOR and Paris: Ernest Leroux.
- . 1889. The Onomastic Similarity of Nai Hwang-ti of China and Nakhunte of Susiana. *BOR* 3: 256–264.
- Laet, J. de. 1633. *Persia seu Regni Persici status. variaque Itinera in atque per Persiam: cum Aliquot Iconibus Incolarum*. Leiden: Elzevier.
- Lange, J.P. 1880. *A Commentary on the Holy Scriptures. Vol. XV. Of the Old Testament, containing the Apocrypha*. New York: Charles Scribner's Sons.
- Lassen, C. 1842. Persepolis. *Allgemeine Encyklopädie der Wissenschaften und Künste* 3/17: 347–370.
- Laurent, P.E. 1840. *A Manual of Ancient Geography or The Student His Own Instructor*. Oxford: Henry Slatter.
- Layard, A.H. 1842. Ancient Sites Among the Baktiyari Mountains. With Remarks on the Rivers of Susiana, and the Site of Susa, by Professor Long, V.P. *JRGS* 12: 102–109.
- . 1851. *Inscriptions in the Cuneiform Character, from Assyrian Monuments*. London: Harrison and Son.
- Le Maistre de Sacy, L.I. 1723. *La Genèse traduite en François*. Brussels: Eugene Henry Fricx.
- Lenormant, F. 1874a. *Choix de textes cunéiformes inédits ou incomplètement publiés jusqu'à ce jour, deuxième fascicule*. Paris: Maisonneuve et C^{ie}.
- . 1874b. *La magie chez les Chaldéens et les origines accadiennes*. Paris: Maisonneuve et C^{ie}.
- . 1875. *Les principes de comparaison de l'Accadien et des Langues touraniennes. Réponse à une critique*. Paris: Ernest Leroux.

- . 1877. Les dieux de Babylone et de l'Assyrie. *Revue de France* 18: 522–548.
- Lenz, S. 1739. *Historisch-Genaealogische Untersuchung der Erz – Väter vor und nach der Sindfluth*. Frankfurt and Leipzig.
- Lichtenstein, A.A.H. 1803. *Tentamen palaeographiae Assyrio-Persicae*. Helmstadt: C.G. Fleckeisen.
- Loftus, W.K. 1857a. *Travels and Researches in Chaldaea and Susiana*. New York: Robert Carter & Brothers.
- . 1857b. On the Determination of the River “Eulæus” of the Greek Historians. *JRGS* 27: 120–133.
- Long, G. 1833. On the Site of Susa. *JRGS* 3: 257–267.
- Longpérier, A. de. 1845. Vase fabriqué en Égypte pendant la Domination perse. *RA* 1/2: 444–451.
- Longuerue, L. du F. de. 1732. *Annales Arsacidarum*. Strasburg: J. R. Dulssecker.
- . 1784. *Opuscles de M. Louis du Four de Longuerue, Abbé de Sept – Fontaines & de Saint – Jean – du – Jard*, vol. 2. Yverdon.
- Löwenstern, I. 1850a. Lettre à M. de Saulcy, sur la deuxième écriture de Persépolis. *RA* 6/2: 490–496.
- . 1850b. Remarques sur la deuxième écriture cunéiforme de Persépolis, précédées d'une lettre sur cette écriture. *RA* 6/2: 687–728.
- . 1853. La langue scythique retrouvée. *RA* 10/1: 82–89.
- Löwisohn, S. 1821. *Biblische Geographie*. Vienna: Carl Ferd. Beck.
- Luzzatto, P. 1850. *Études sur les Inscriptions assyriennes de Persépolis, Hamadan, Van et Khorsabad*. Padua: Antoine Bianchi.
- Mannert, K. 1797. *Geographie der Griechen und Römer, fünfter Theil. Zweytes Heft. Die Persische Monarchie bis zum Euphrat*. Nürnberg: Ernst Christoph Grattenauer.
- Marracci, L. 1705. *Onomasticon Urbium*. Lucae: Nicolai Mencacci.
- Meissner, B. 1894. Quellenuntersuchungen zur Ḫaiḵârgeschichte. *ZDMG* 48: 171–197.
- Ménant, J. 1874. *Annales des Rois d'Assyrie traduites et mises en ordre sur le texte assyrien*. Paris: Maisonneuve et C^{ie}.
- . 1885. *Les langues perdues de la Perse & de l'Assyrie. Perse*. Paris: Ernest Leroux.
- Menke, T. 1862. Zur Geographie von Susiana. *Jahrbücher für classische Philologie* 85: 545–556.
- Mentelle, E. 1773. *Anecdotes orientales, première partie, contenant les anciens Rois de Perse, & les différentes Dynasties Perses, Turques & Mongoles, qui se sont élevées successivement en Asie, jusqu'aux Califes & aux Sophis exclusivement*. Paris: Vincent.
- Mitchell, S.A. 1845. *Mitchell's Ancient Geography, Designed for Academies, Schools, and Families*. Philadelphia: Thomas, Cowperthwait & Co.
- Mongez, A. 1799. Mémoire sur Persépolis. *Mémoires de l'Institut National des Sciences et Arts. Littérature et Beaux Arts* 3: 212–302.
- Mordtmann, A.D. 1862. Erklärung der Keilinschriften zweiter Gattung. *ZDMG* 16: 1–126.
- . 1870. Ueber die Keilinschriften zweiter Gattung. Zweiter Artikel. *ZDMG* 24: 1–84.
- Moullart – Sanson, P. 1721. *Persarum imperium in viginti satrapias vectigales distributum, ut eas ordinaverat Darius Histaspis filius tertius persarum rex, in scripturis sacris Assuerus dictus*. Paris.
- Müller, G.F.H. 1849. *Namen – und Sach-Verzeichniß zu Carl Ritter's Erkunde von Asien*, vol. 2. Berlin: G. Reimer.
- Münter, F. 1802. *Versuch über die keilförmigen Inschriften am Persepolis*. Copenhagen: C.G. Proft.

- Nägelsbach, C.W.E. 1850. *Der Prophet Jeremias und Babylon. Eine exegetisch – kritische Abhandlung*. Erlangen: Heyder and Zimmer.
- Neubauer, A. 1868. *La géographie du Talmud*. Paris: Michel Lévy Frères.
- Niebuhr, C. 1778. *Reisebeschreibung nach Arabien und andern umliegenden Ländern*, vol. 2. Copenhagen: Hofbuchdruckerey bey Nicolaus Möller.
- Nöldeke, T. 1869. *Untersuchungen zur Kritik des Alten Testaments*. Kiel: Schwers'sche Buchhandlung.
- . 1874. Griechische Namen Susiana's. *Nachrichten von der Königlichen Gesellschaft der Wissenschaften und der G.A. Universiät zu Göttingen* 8, 1. April: 173–197.
- . 1899. *Die semitische Sprachen. Eine Skizze*, 2nd ed. Leipzig: Chr. Herm. Tauchnitz.
- Norris, E. 1853. *Memoir on the Scythic Version of the Behistun Inscription*. London: Harrison & Sons.
- Oppert, J. 1863. *Mission scientifique en Mésopotamie*, vol. 1. Paris: Imprimerie Impériale.
- . 1871. Über Kedorlaomer. *Theologische Studien und Kritiken* 24/2: 509–512.
- . 1876a. Les inscriptions en langue susienne. Essai d'interprétation. In: *Congrès international des Orientalistes, Comptes-Rendu de la Première Session, Paris – 1873*, vol. 2. Paris: Maisonneuve et C^{ie}, 179–216.
- . 1876b. Ueber die Sprache der alten Meder. *ZGMG* 30: 1–5.
- . 1877 or 1878. Susian texts. In: Sayce, A.H. (ed.) *Records of the Past, vol. 7. Assyrian texts*. London: Samuel Bagster and Sons, 79–84.
- . 1884. La langue des Élamites. *CRAIBL* 28/3: 326.
- . 1885. La langue des Élamites. *Revue d'Assyriologie et d'Archéologie Orientale* 1/2: 45–49.
- . 1887. Amraphel et Hammurabi. *CRAIBL* 31/4: 492–500.
- Ouseley, W. 1821. *Travels in Various Countries of the East; More Particularly Persia*, vol. 2. London: Rodwell and Martin.
- Patrick, S. 1706. *A Commentary Upon the Two Books of Chronicles: Ezra, Nehemiah, and Esther*. London: R. Chiswell.
- Pereira, B. 1596. *Commentariorum in Genesim*, vol. 3. Lyon: Ex officina Iuntarum.
- Pfeiffer, A.F. 1777. *Joseph Simonius Asseman's orientalische Bibliothek oder Nachrichten von syrischen Schriftstellern*, vol. 2. Erlangen: Wolfgang Walthers.
- Phillott, H.W. 1875. Eastern Geography of the Bible. Media and Persia. In: Plumptre, E.H. (ed.) *The Bible Educator*, vol. 3. London, Paris and New York: Cassell, Petter & Galpin, 22–25.
- Pinches, T.G. 1880. On a Cuneiform Inscription Relating to the Capture of Babylon by Cyrus, and the Events Which Preceded and Led to It. *Transactions of the Society of Biblical Archaeology* 7/1: 139–176.
- . 1884. Observations Upon the Languages of the Early Inhabitants of Mesopotamia. *JRAS* 16/2: 301–324.
- Pitman, J.R. 1822. *A Critical Commentary and Paraphrase of the Old and New Testament and the Apocrypha*, vol. 4. London: Richard Priestley.
- Rawlinson, G. 1860. *The Historical Evidences of the Truth of the Scripture Records Stated Anew*. Boston, MA: Gould and Lincoln.
- . 1862. *Five Great Monarchies of the Ancient Eastern World*, vol. 1. London: John Murray.
- Rawlinson, H.C. 1839. Notes on a March from Zoháb, at the Foot of Zagros, Along the Mountains to Khúzistán (Susiana), and from Thence Through the Province of Luristan to Kirmánsháh, in the Year 1836. *JRGS* 9: 26–116.

- . 1848. The Persian Cuneiform Inscription at Behistun, Decyphered and Translated: With a Memoir on Persian Cuneiform Inscriptions in General, and on that of Behistun in Particular. *JRAS* 10: i–lxxi, 1–265, 268–349.
- . 1850. On the Inscriptions of Assyria and Babylonia. *JRAS* 12: 401–483.
- . 1851. Memoir on the Babylonian and Assyrian inscriptions. *JRAS* 14/1: i – civ, 1–16.
- . 1861/1866. *The Cuneiform Inscriptions of Western Asia*, 3 vols. London: Lithographed by R.E. Bowler.
- . 1880. Notes on a Newly-Discovered Clay Cylinder of Cyrus the Great. *JRAS* 12: 70–97.
- Rennell, J. 1800. *The Geographical System of Herodotus, Examined; and Explained, by a Comparison with Those of Other Ancient Authors, and with Modern Geography*. London: G. and W. Nicol.
- Ribera, A.T. 1596. *Commentaria in Genesim: Mendis nunc sanè quam plurimus diligenter expurgata*. Venice: J.B. Sessam Brothers.
- Rich, M. 1839. *Narrative of a Journey to the Site of Babylon in 1811, Now First Published*. London: Duncan and Malcolm.
- Ritter, C. 1840. *Die Erdkunde von Asien, Band VI. Zweite Abtheilung. Drittes Buch. West – Asien. Iranische Welt*. Berlin: G. Reimer.
- Rowe, Mrs. Elizabeth. 1744. *The History of Joseph. A Poem in Ten Books*, 4th ed. London: B. Dod.
- Saint-Martin, V. de. 1823. Extrait d'un Mémoire relatif aux antiques Inscriptions de Persépolis, lu à l'Académie des Inscriptions et Belles – Lettres. *Journal Asiatique* 2/1: 65–90.
- . 1836. Nouvelles observations sur les inscriptions de Persépolis. *Mémoires de l'Institut Royal de France (Académie des Inscriptions et Belles-Lettres)* 12/2: 115–146.
- Salian, J. 1619. *Annales Ecclesiastici Veteris Testamenti*, vol. 1. Paris: Ex Officina Nivelliana.
- Salisbury, E.E. 1849. On the Identification of the Signs of the Persian Cuneiform Alphabet. *Journal of the American Oriental Society* 1/4: 519–558.
- Sanson, M. 1717. Dissertation Géographiques, ou l'on fait voir que les Élamites on regné sur les Pays compris entre la Mer Egée, & le Fleuve de l'Inde. In: Le Maistre de Saci, L.I. (ed.) *La Sainte Bible en Latin et en François*, vol. 4. Paris: Guillaume Desprez and Jean Desessartz, 642–648.
- Santini, P. 1779. *Carte de l'Empire perse, dressée sur les Cartes du Sr. d'Anville*. Venice.
- Santo Caro, H. de, Hubert, P. and Luca, F. 1733. *Sacrorum Bibliorum vulgatae editionis concordantiae*. Venice: Niccolò Pezzana.
- Sarzec, E. de. 1884. *Découvertes en Chaldée*, vol. 1. Paris: Leroux.
- Saulcy, F. de. 1849. Recherches analytiques sur les inscriptions cunéiformes du système médique. *Journal Asiatique*, 4th ser. 14: 93–213.
- . 1850. Note sur les inscriptions trouvées à Khorsabad, et qui couvrent le seuil des portes du palais. *RA* 6/2: 765–772.
- Sayce, A.H. 1874. The Languages of the Cuneiform Inscriptions of Elam and Media. *Transactions of the Society of Biblical Archaeology* 3: 465–485.
- . 1882. Cyrus était-il roi de Perse ou de Susiane? *Le Muséon* 1: 548–556.
- . 1884. The Inscription of Mal-Amir and the Language of the Second Column of the Akhæmenian Inscriptions. In: *Actes du Sixième Congrès International des Orientalistes, tenu en 1883 à Leide, première partie*. Leiden: Brill, 639–756.
- . 1886. La situation géographique d'Anzan. *Le Muséon* 5: 501–505.

- Scheil, V. 1900. *Textes élamites – sémitiques, première série*. Paris: Mémoires de la Délégation en Perse 2.
- Schlegel, G. 1891. China or Elam. *T'oung Pao* 2/3: 244–246.
- Schmidt, J.J. 1740. *Biblische Geographie*. Züllichau [Sulechów]: Gottlob Benjamin Frommann.
- Schrader, E. 1872. *Die Keilinschriften und das Alte Testament*. Gießen: J. Ricker'sche Buchhandlung.
- Smith, G. 1868. Egyptian campaigns of Esarhaddon and Assur-bani-pal. *Zeitschrift für Ägyptische Sprache und Alterthumskunde* (Nov. 1868): 113–122.
- . 1871. *History of Assurbanipal, Translated from the Cuneiform Inscriptions*. London and Edinburgh: Williams and Norgate.
- Spruner von Merz, K. 1850. *Atlas Antiquus*. Gotha: J. Perthes.
- Suhm, P.F. 1769. *Forsøg til et udkast af en historie over Folkenes Oprindelse i almindelighed, som en indledning til de Nordiske Folkes i Særdeleshed*. Copenhagen: J.C. and G.C. Berling.
- Sylvestre de Sacy, A.I. 1793. *Mémoires sur diverses antiquités de la Perse, et sur les médailles des rois de la Dynastie des Sassanides; suivis de l'Histoire de cette Dynastie, traduite du Persan de Mirkhond*. Paris: Imprimerie Nationale Exécutive du Louvre.
- . 1803. Lettre de M. Silvestre de Sacy à M. Millin, sur les Monumens persépolitains. *Magasin Encyclopédique, ou Journal des Sciences, des Lettres et des Arts* 5: 438–467.
- Talbot, W.H.F. 1862. Assyrian Texts Translated. *JRAS* 19: 135–198.
- . 1874. Taylor's Cylinder of Sennacherib. In: Birch, S. (ed.) *Records of the Past, vol. 1. Assyrian texts*. London: Samuel Bagster and Sons, 33–53.
- Todd, H.J. 1809. *The Poetical Works of John Milton, with Notes of Various Authors*, 2nd ed., vol. 5. London: J. Johnson et al.
- Tuch, D.F. 1847. Bemerkungen zu Genesis C. 14. *ZGMG* 1: 161–194.
- Tychsen, O.G. 1798. *De cuneatis inscriptionibus Persepolitanis lucubratio*. Rostock: Libraria Stilleriana.
- . 1802. Göttingen. *Göttingische gelehrte Anzeigen* 149 (18 September 1802): 1481–1487.
- Ujfalvy de Mezö – Kövsed, C.E. de. 1874. *Mélanges altaïques*. Paris: Maisonneuve.
- Vincent, W. 1797. *The Voyage of Nearchus from the Indus to the Euphrates*. London: T. Cadell and W. Davies.
- Wahl, S.F.G. 1784. *Allgemeine Geschichte der morgenländischen Sprachen und Litteratur*. Leipzig: Johann Gottlob Immanuel Breitkopf.
- Walker, D.A. 1888. The Assyrian King, Ašurbanipal. *The Old Testament Student* 8/2: 57–62.
- Weiland, C.F. and Ackermann, C. 1845. *Bibel – Atlas, nach den neuesten und besten Hilfsmitteln*, 2nd ed. Weimar: Verlag des Landes – Industrie – Comptoirs.
- Weissbach, F.H. 1890. *Die Achämenideninschriften zweiter Art*. Leipzig: J.C.Hinrichs'sche Buchhandlung.
- Wells, E. 1711. *An Historical Geography of the Old Testament*, vol. 1. London: James Knapton.
- Westergaard, N.L. 1845. Zur Entzifferung der Achämenidischen Keilschrift zweiter Gattung. *Zeitschrift für die Kunde des Morgenlandes* 6: 337–487.
- . 1854. *Om den anden eller den Sakiske art af akhæmenidernes kileskrift*. Copenhagen: Bianco Lunos Bogtrykkeri.
- Witte, S.S. 1799. *Ueber die Bildung der Schriftsprache und den Ursprung der keilförmigen Inschriften zu Persepolis. Ein philosophisch-geschichtlicher Versuch*. Rostock and Leipzig: Karl Christoph Stiller.

Zingerle, P. 1836. *Echte Akten h. Märtyrer des Morgenlandes. Aus dem Syrischen übersetzt. Erster Theil.* Innsbruck: Verlag der Wagner'schen Buchhandlung.

Zoëga, G. 1797. *De origine et usu obeliscorum.* Rome: Lazzarini Typographi Cameralis.

CHAPTER TWO

Elam and the Bible



Peter Dubovský

Introduction

Elam was one of the major powers of the ancient Near East whose political and military interference would reach far beyond into the West and be surpassed only by its fame. The Bible refers to Elam in various forms 59 times. These references can be divided into two categories: (I) Elam referred to as an eponym and a personal name; and (II) Elam referred to as a toponym and an ethnic category. Within this second category, two further divisions can be observed: (a) Elam, an invader; and (b) Elam, a living space for exiles.

The Hebrew term for Elam is *ʾylm* (*ʾēlām*), derived from Akkadian *elamû*, fem. *elam(m)ītu* (AHw I, 196). The most common Greek transliteration of the Hebrew term is Αἶλαμ used as an eponym (Gen 10:22), a toponym (Gen 14:1), as well as a personal name (Ezr 2:7). Besides Αἶλαμ (Gen 10:22; 1 Chr 8:24), a personal name Elam is also rendered Ωλαμ (1 Chr 26:3) and Ηλαμ (Ezr 2:31). Despite the fact that the Hebrew does not have a gentilic form of Elam, Greek translators used a gentilic form Αἶλαμῖται (Isa 11:11) and its variant Ἐλυμαίς (Tob 2:10; 1 Macc 6:1; Dan 8:2).

The Hebrew consonants *ʾylm* were in two cases changed to *ʾwlm* (Jer 49:36; Ezr 10:2). Despite maintaining the consonant *waw* (*ketib*), the Massoretes considered it a mistake and suggested reading *ʾylm* (*qere*), that is, Elam. The exchange of consonants *yod* and *waw*, however, shows that the word Elam was associated with a Hebrew word *ʾōlām*, “long time, eternity, a long time back” and in the adverbial position “forever”. This association indirectly shows that a Hebrew native speaker associated Elam with an ‘eternal’ kingdom.

A different association creates the most common Greek transliteration of the word Elam – Αἶλαμ. The same Greek word is also used to describe the porch leading to the temple *ʾûlām* (1 Kgs 6:3), spelled also *ʾwlm*, *ʾlm*, *ʾylm*. The Greek Αἶλαμ thus associates Elam with an area through which one should pass to a holy space.

Eponym and personal names

The term Elam appears for the first time in the Bible in the table of nations as an eponym and then in later books (Chronicles, Ezra, and Nehemiah) as a personal name (*HwAT* 955; *DCH* VI, 355).

Eponym

Elam was inserted into the table of nations (*tabula gentium*) as a member of Sem's branch (Gen 10:22; 1 Chr 1:17). The biblical division of historical periods and relationships between nations differ from modern divisions based on pottery, architecture, language, culture, and so on. The basic concept forming the mental pattern for any division was patriarchal family. As a *pater* ('*ab*') was a head of a family, so *pater familias* was a head, that is, founder and ancestor of a nation and ethnic group (Cross 1998; Malamat 2001). Independently of ethnic identity, the names used in the genealogies have different forms: (1) personal names (for example, the descendants of Sem); (2) toponyms (Egypt – in Hebrew it is in the plural); (3) gentilic names ending in *y* (most names of Japhet's and Ham's branch). In this sense, the proper name Elam stands for the *pater familias* of the Elamites and has the form of a personal name.

The concept of *pater familias* extended to guilds, technologies, culture, and music. Thus agriculture, weapons, musical instruments, or even wine production were traced back to their *pater* (Gen 4:2.17.20.22; 9:20–23, etc.). Using this conceptual framework, Gen 10 offers elaborated relationships among the nations of the ancient Near East, tracing them back to their ancestors (Blenkinsopp 1992: 54–55). These relationships form linear and segmentary genealogies which have no parallels in the ancient Near East and appear only in Arabic historiography, probably inspired by the biblical patterns. Following a linear genealogy, every nation traces its vertical succession line to Noah and his three sons. Following a segmentary lineage, Gen 10 allows us to determine the horizontal relationships among apparently different ethnic groups. The description starts with sons of Japhet (Gen 10:2–5). The nations belonging to this group were the most distant relatives of Israel. The sons of Ham (Gen 10:6–20) were the most important neighbors of Israel, such as Egypt and the Canaan. The most important branch was that of the sons of Sem. According to a later Jewish tradition (*Ant.* 1:143), the first son, Elam, was the ancestor of the Elamites, who were the ancestors of the Persians. The second son, Ashur, was the founder of Nineveh and Assyria. The third son, Arpachshad, was the ancestor of the Chaldeans (Babylonia), the fourth son, Lud, was the ancestor of the Lydians, and the fifth son, Aram, was the ancestor of the Syrians. Abraham and, ultimately, the Israelites also belonged to Sem's branch. Abraham's father, Terah, was the tenth descendant of Sem: Sem-Arpachshad-Shelah-Eber-Peleg-Reu-Serug-Nahor-Terah-Abraham (Gen 11:10–28).

In light of these biblical genealogies Elam is the first son of Sem, whereas Abraham came from Sem's third son, Arpachshad. Although he is Sem's firstborn son, Elam's lineage is not developed. It is significant that the first three sons of Sem are the three nations that participated in the fall of Israel and Judah, and represent the countries in which the Israelite exiles lived. Elamites participated in the fall of Judah, Assyrians brought down Samaria, and Babylonians conquered Jerusalem. Finally, Aram, the fifth son of Sem, was also a source of severe affliction for Israel (1 Kgs 20; 2 Kgs 6).

Thus, the table of nations inserts Elam into a vertical relationship with its predecessors and also defines horizontal relationships with other nations occupying the ancient Near East. The insertion of Elam into Sem's branch shows that, on the one hand and despite geographical distance, Elam was a close "relative" of Israel. On the other hand, Israel's closest relatives (Elam, Assyria, Babylonia, and Aram) were involved in constant military conflict.

Personal names

Several texts composed after the exile, such as Chronicles, Nehemiah, and Ezra, mention Elam as a personal name given to different individuals (*HwAT*, 955; *DCH* VI, 355). Six persons bearing this name appear in the Bible: (1) a Benjaminite (1 Chr 8:24); (2) a Levite musician (Neh 12:42); (3) a Korahite gatekeeper (1 Chr 26:3); (4) a lay chief of people, a signatory of the covenant at time of Nehemiah (Neh 10:15; 12:42); (5) a returnee from Babylonian exile (Ezr 2:7/Neh 7:12; Ezr 8:7; 10:2); and (6) an ancestor of another family returning from exile (Ezr 2:31/Neh 7:34). To this list we can also add the references in 1 Esd 5:12; 8:33; 9:27. While it is impossible to give more details about these individuals, their occurrence seems to indicate that during the Persian and later periods when Elam was fully incorporated into the Persian provincial system, the name Elam became a popular personal name. Thus, for example, in Chronicles and 1 Esdras, the term Elam is no longer used as a toponym but only as an eponym or a personal name.

Elam – toponym and ethnic category

The texts belonging to this category reflect political events and the cultural and religious thought of the period(s) in which they were composed and redacted. Since the Bible presents world history from the Judean viewpoint, it is only natural that this group of references to Elam were also marked by the same interpretative patterns. The most important event in the history of Judah was represented by the fall of Jerusalem, even though similar events were not uncommon in the history of the ancient Near East, and therefore this group of texts can be divided into two clusters: the texts reflecting the pre-exilic period (Genesis, Isaiah, Jeremiah, Ezekiel) and the post-exilic/later texts. Whereas the first cluster emphasized more the bellicose

nature of Elam, the post-exilic texts depict Elam as the place where Israelite and Judean exiles lived and even prospered.

Pre-Exilic Period: Elam-destroyer will be destroyed

The books of Genesis, Isaiah, Jeremiah, and Ezekiel all describe the bellicose nature of Elam. From ancient times (Abraham's story) until the end of the first temple, Elam appears as an invader and the Elamites as skillful warriors and politicians. The most important feature of Elam was its superior military power, whose synecdoche was a bow (Jer 49:35). The bow indeed was a well-chosen symbol of Elam, since the archers were the strongest point of the Elamite army in the Neo-Elamite period (Brinkman 1986: 203). Elam both led or participated in various military campaigns, defeating a powerful coalition of Canaanite kings and even helping to bring down the two most powerful kingdoms of the world – Egypt and Babylon. The prophecies against Judah (Isa 22:6; Jer 25:25) also mention Elamite participation in the conquest and destruction of Judah. The message of the biblical writers reflects a twofold logic. If the Canaanite coalition, Egypt and Babylon, were defeated with the help of Elamite troops, would Judah be able to resist an invasion in which Elam was involved?

However, Jeremiah also prophesized the end of Elam in the context of the doom prophecies against the nations. Ultimately Elam, the invader *par excellence*, was only one piece in the large mosaic of political movements in the Levant. All major political and military powers (invaders), such as Assyria, Egypt, and Babylonia, as well as minor kingdoms such as Moab, Edom, and Ammon collapsed; would Elam be an exception?

In sum, the Bible depicts Elam from two points of view: Elam the destroyer (Gen 14; Isa 21:2; Jer 25:5; Ezek 32:24) and the destroyed Elam (Jer 49:34–39). An analysis of the texts belonging to these categories suggests that they originated in the pre-exilic period. Consequently, Israel and Judah seem to have come into some contact with Elam during this time, most likely during Assyrian and Babylonian invasions when Elamite units were incorporated into the imperial forces and when the bellicose nature of Elam came forth in its full strength.

Elam against the Canaanite coalition (Gen 14)

The first text mentioning Elam in the context of its expansionistic campaigns is Genesis 14. The coalition of the Mesopotamian kings, their campaigns against the Western Levant, and in particular their insertion into the Abraham cycle raise several questions regarding the composition and literary history of chapter 14 and its historical reliability (Andreasen 1980; Granerød 2010).

Verses Gen 14:1–11 display a well-known pattern of invasion which fits into a literary genre

defined by four steps: campaign-vassalage-rebellion-punitive campaign(s). The Bible used a similar literary genre on other occasions, in particular to describe the fall of Samaria (2 Kgs 17:1–6) and the fall of Jerusalem (2 Kgs 24–25) (Dubovský 2016). In these cases, the introductory verses describe an invasion by a foreign king resulting in a period of vassalage (Gen 14:1–4; 2 Kgs 17:3; 24:1a). After being subject to a foreign king, the vassals rebelled and a second, punitive, campaign took place (Gen 14:4–12; 2 Kgs 17:4–6.23; 24:1b–10). In the case of the fall of Jerusalem, this literary pattern reflects the order of events described in the Babylonian Chronicle (*ABC* 5). Judging by similarities between 2 Kgs 24 and *ABC* 5 as well as other studies, scholars almost unanimously agree that 2 Kgs 24:1.8–17 matches the actual order of historical events that took place during the invasions of Nebuchadnezzar in Judah between 604–597 BCE. A similar conclusion was also reached for the fall of Samaria (2 Kgs 17). Thus, the Bible in Gen 14:1–11 uses a literary genre that in other biblical accounts matches, as precisely as any ancient narrative did, the order of historical events. From the historiographic viewpoint Gen 14:1–11 can be labeled annalistic in style, describing the political instability and changing allegiances typical of the 1st and 2nd millennium BCE.

Based on the similarities between the invasion literary genres, it can be concluded that while verses 14:1–11 describe a normal order of events, they also contain a few ellipses. The first ellipsis is between verses 1–3 and 4. After the list of kings and their armies, the Elamite troops, deployed in the valley of Siddim, were included (14:1–3). However, there is no description of the battle between the two coalitions. Verse 4 passes directly to the result, presupposing the victory of the Mesopotamian coalition. It summarizes 12 years of vassalage of the Levantine kings; 4b concludes with a short note on the rebellion. The description of the punitive campaign led by the Elamite king Chedorlaomer occupies most space in this narrative (14:5–12).

The strategy of this punitive campaign also corresponds to typical military strategies of the 2nd and 1st millennium BCE characterized by the gradual harassment and weakening of enemy forces (Westermann 1981: 190–192). The reconstruction of the itinerary of the punitive campaign shows that Chedorlaomer and his Mesopotamian allies marched southwards along the royal road in Transjordan, conquering first Ashteroth-karnaim and then other cities. After penetrating far enough into the south, they turned westwards and conquered Kadesh. The Elamite king, Chedorlaomer, first attacked the weakest elements of the coalition of the rebels (east and south) moving along the royal road. Once the coalition had been weakened, he led his army against the heart of the coalition of the rebels – Sodom and Gomorra. The debilitated coalition could not withstand the attack and Sodom and Gomorra fell into the hands of the invaders. The cities were conquered and looted, and their inhabitants were deported. The rebels were defeated in the same place, the valley of Siddim, where they had been defeated 13 years earlier. A similar strategy was also used by Tiglath-pileser III in 734–731 BCE when facing the Syro-Ephraimite coalition and by Sargon II in his glorious conquest

of Babylon in 710–709 BCE (Dubovský 2006: 157–164).

An additional consideration that can cast light on the entangled problem of the historicity of this chapter concerns its specific vocabulary (Wenham 1987: 318–320). The tone of verses 14:1–11 is different from the rest of the Abraham cycle. It abounds in geographical and ethnographical details, some of them known from the texts of the 1st and 2nd millennium BCE. Of the words occurring in this chapter, 4.5% are otherwise unattested elsewhere in the Bible and another 6.5% occur only rarely. The note in 14:7 identifying the city of En-mishpat with Kadesh shows that the later editor needed to explain a toponym no longer understandable for a reader of his period (cf. also 14:8.17). Moreover, the expression “a thread or a sandal-thong” in 14:23 also occurs in the Akkadian and Egyptian texts (Wenham 1987: 318; Morschauer 2013).

It must be acknowledged, however, that no text has been preserved that would directly or indirectly corroborate the existence of such a campaign, despite all scholarly efforts to connect it with the expansionistic policy of the Old-Babylonian or other periods and kingdoms (Block 1998: 226). Nor is the identification of the names with heroes known from extra-biblical sources certain. Moreover, the final text of Gen 14 shows that the goal of the chapter was not to describe the military conflict but to demonstrate the ability of Abraham, who was able to save his nephew Lot from the clutches of potent enemies (Gen 14:12–16). Abraham’s victory serves as a prototype for other military narrative cycles. Thus, Gideon defeated the superior Midianite army (Jdg 6–7), and Joshua defeated Canaanite coalitions led by the Jerusalemite king Adoni-sedeq and king Jabin of Hazor in Josh 10–11. By doing this, the biblical authors set Abraham above all Mesopotamian and Levantine kings. As Solomon exceeded the Mesopotamian kings in wisdom and richness (cf. 1 Kgs 4–5), so Abraham exceeded them – Elamite kings included – in prowess. While five Canaanite kings could not stop Chedorlaomer’s troops, Abraham with 318 men succeeded in defeating their coalition. Through the insertion of the story into the Abraham cycle, the final redactor showed that Abraham’s prowess was not for personal glorification but for the glorification of his family. Abraham, the *pater familias* par excellence, was willing to risk his own life in order to rescue a member of his family and faith in God (Sarna 1989: 101–103).

The description of Abraham’s military victory was further enlarged by a story describing Melchizedek’s blessing of Abraham (Wenham 1987: 307) and recognizing the suzerainty of the Almighty, the God of Abraham (Gen 14; 17–24). Since for a later reader Salem evoked Jerusalem (GenApoc 22:13), the submission of Melchizedek prefigured the submission of Jerusalem to Joshua and David. In short, the military campaign of the Mesopotamian kings conducted against recalcitrant Canaanians was not the primary goal of this passage, as is demonstrated by several ellipses and the redactional history of the chapter; rather it served as a narrative introduction to one of the stories of the Abraham cycle.

In sum, despite the fact that there is no evidence to prove or disprove the historicity of the

campaigns described in Gen 14, the elements retrieved earlier suggest that there is nothing in Gen 14 that would go against the mentality and customs of the 2nd and the early 1st millennium BCE. There are no clear indications that would urge us to conclude that the core of Gen 14:1–11 was invented by post-exilic redactors compelled to justify their present by inventing the past. On the contrary, it stands to reason to conclude that biblical writers describing the Elamite king Chedorlaomer as leader of the Mesopotamian kings marching against the Levant drew this information from a source they considered reliable and skillfully incorporated it into the Abraham cycle, most likely in the period of the monarchy (Kallai 1998: 218–242) or later (Glissmann 2009).

This source opens a first window onto the biblical perception of Elam. The word “Elam” occurs twice in the narrative (Gen 14:1.9), although Symmachus’ Greek translation substitutes it with the word “Scythians”. In this chapter, Elam is represented by its king Chedorlaomer (Gen 14:1.4.5.9.17). In the first campaign, he is listed as the third member of the Mesopotamian coalition, whereas from v. 4 on he becomes the leader of the coalition. He is then listed in first place (14:9) and in verses 14:4–5.17 the other kings, his allies, are mentioned without being named. This would suggest that within the span of a few years the Mesopotamian coalition was restructured and at a certain point Chedorlaomer took the lead. He proved to be an adroit leader, not only able to lead a coalition of Mesopotamian kings but also an astute strategist. He behaved like a typical Mesopotamian king; he and his allies plundered the city after its conquest, taking booty and slaves. So the bellicose nature of the Elamites comes forward at the outset of Israelite history. Elam is the leader of the invaders who were defeated by Abraham’s men.

Elam against Babylon and Egypt (Isa 21:2; Ezek 32:24)

Isa 21:2: *A stern vision is told to me; the betrayer betrays, and the destroyer destroys. Go up, O Elam, lay siege, O Media; all the sighing she has caused I bring to an end* (NRSV).

Here Media and Elam are summoned for an attack. In order to explain this complicated verse, several proposals have been made. It has been suggested that it describes a moment of confrontation between Assyria and Babylonia sometime in the 8th or 7th centuries BCE, probably ending with the conquest of Babylonia by Sargon II or Sennacherib (Watts 2005: 328–329). Alternatively, since the passage reflects an anti-Babylonian stand similar to that described in Isa 47 (cf. also Jer 50:2; 51:8), it has been postulated that the poem is contemporaneous with Isa 47, reflecting the situation just before the fall of Babylon to the Persians in the 6th century BCE (Blenkinsopp 2000: 326). It is difficult to connect this vision with a precise historical event because the existence of a coalition between Medes and Elamites against Babylonia is not confirmed by the available sources (Beuken 2007: 225–226). Rather, the call for an attack reflects two themes. Firstly, the text seems to telescope the

shifting of allegiances in Mesopotamia, a diplomatic game in which Elam played its part. Elam, the traditional supporter of Babylonian resistance against Assyria, turned out to be the enemy attacking Babylon. As it once betrayed Assyria, now it betrays its ally – Babylonia; as it once destroyed its neighbors with the help of Babylonia, now it turns against Babylonia. Elam and Media did not change their “destructive” and “treacherous” nature; they changed only their target. The second theme is the repeated conquest of Babylon: in 710 by Sargon II; in 700 and 689 by Sennacherib; in 648 by Ashurbanipal; and by Cyrus II in 539 BCE. The text would fit well into the period before Cyrus II’s invasion, presenting a pattern of the rise and the fall of several Mesopotamian empires. According to Isa 21, Elam played an important role in this intricate political and military game.

Similarly, according to Ezekiel (32:24), Elam comprises part of the army devastating Egypt. Verses 24 and 25 are virtually parallels and often called section Elam A by biblical scholars (Block 1998: 223). Since the Neo-Assyrian troops invaded Egypt, and not the Neo-Babylonian ones, it is possible that this passage reflects the fall of Egypt into Assyrian hands.

Elam against Judah (Isa 22:6; Jer 25:25)

Isa 22:6: *Elam bore the quiver with chariots and cavalry, and Kir uncovered the shield* (NRSV). Chapter 22 of the Book of Isaiah describes the attack by the foreign troops against Jerusalem: Elam together with Aram and Kir was called to advance against Judah. Verses in prose (22:8b – 11) connect the participation of Elam with Neo-Assyrian campaigns against Judah, in particular that of Sennacherib in 701 BCE (Watts 2005: 342). Like the previous chapter (see above), chapter 22 can hardly be connected with a precise historical event. Since Elam is also called to attack Jerusalem in the context of Babylonian campaigns (Jer 25:25), and the Elamite troops might have served in both the Neo-Assyrian and Neo-Babylonian armies, verse 22:6 could be dated to different periods. Thus the verse could represent both Neo-Assyrian and Neo-Babylonian plundering of Judah. (Blenkinsopp 2000: 334–335; Beuken 2007: 254). In sum, the chapter in poetic language says that Elam was one of several important political and military powers which were used by God symbolically as the whole known world (Jer 25:19–26) to attack, plunder, and destroy Judah.

Oracle against Elam (Jer 49:34–39)

Jer 49:34–39 represents the longest passage dedicated to Elam in the Bible. Among the nations mentioned in the oracle series (Jer 46–51), Elam represents the most distant kingdom and indeed the Book of Jeremiah is the only collection of prophecies containing an oracle against it. Why did Jeremiah address a nation so far distant? A few possible answers have been proposed (Lundbom 2004: 361). First, Elam was an important world power and thus to claim

YHWH's sovereignty over the world meant to affirm God's rule over the whole world, that is, from Egypt to Elam. Second, Elam was involved in the political events that directly or indirectly influenced Judah. Third, the downfall of Elam served as a prototype for the downfall of Judah.

The different meanings of the oracle against Elam can be better understood when it is inserted into its literary context. The oracle section (Jer 46–49) is placed after Jeremiah's controversy with the kings and nobles of Jerusalem (Jer 37–45) and is followed by the oracle against Babylonia (Jer 50–51). The biblical writers depicted Elam as one of nine political powers competing for sovereignty over the world or its parts, all of which, Elam included, were doomed to destruction. The order of oracles in the Hebrew text shows that its goal was to warn Jerusalem that no power, however important it had been, could resist God. Not only the most important empires such as Egypt, Babylonia, and Elam collapsed, but the minor kingdoms surrounding Judah, such as Philistia, Moab, Edom, Amon, and the Arabs also met a similar end. Chapter 52 of Jeremiah shows that since Judah did not listen, it was destroyed in a similar way to the other nine kingdoms – Elam included.

The aim of these oracles also determined the form and vocabulary of the oracle against Elam. The order of the events described in Jeremiah is not logical (McKane 1996: 1246): military defeat (49:35), deportation (49:36), fear in front of the enemies (49:37a), destruction (49:37b), restoration (49:38a), elimination of the ruling class (49:38b), and restoration (49:39). The alternation of themes and lack of straightforward chronological order reflect the complex mechanics of the downfall of various kingdoms, in particular the gradual Assyrian conquest of Elam (Dubovský 2013). Also reflected are the vicissitudes during the last years of Samaria as described in 2 Kgs 15 and 17 (Dubovský 2014) and Jerusalem as described in 2 Kgs 24–25. Similarly, the author employed several expressions often used for the description of the fall of Jerusalem, such as “to bring four winds” and “to scatter ... to the winds” (1 Kgs 14:15; Ezek 20:23; 22:15), “exiles” (Deut 30:4; Isa 11:12), “to bring disaster upon” (2 Kgs 22:16), and so on. Finally, from among the nine kingdoms, only the former status of three (Moab, Amon, and Elam) was restored. This sheds a different light on the last four verses of the Book of Jeremiah (Jer 52:31–34). As the destiny of three destroyed kingdoms was changed, the change of destiny of Jehoiachin on the Babylonian throne could become the topos of the restoration of Judah after its destruction.

In sum, the main goal of the oracle section was not to describe the downfall of the Levantine kingdoms but to create the theological and historical context for the fall of Jerusalem. As the “bow of Elam”, the symbol of Elam's military power, was destroyed, so the symbols of Judean military resistance would be destroyed. As God changed the destiny of Elam, God can change the destiny of Judah.

In contrast to the vivid description of the destruction of other kingdoms, Jer 49:34–39 gives no details on Elam, its culture, military power, or religion. “There are no calls to attack, no

summons to flight, no description of Elamite reactions, and no expressions of sorrow or mourning.” (Keown et al. 2002: 342) The only more specific term used for the description of Elam is “bow”, the mainstay of its power. However, bow is a general expression for military power used also for other nations (Isa 5:28; 21:17; Ezek 39:3). Similarly, most of the expressions mentioned earlier are typically employed in the Bible to speak about oncoming disasters. These points raise the question of whether the oracle against Elam was a literary creation intended as a warning or in fact referred to a concrete historical event?

Despite the efforts of the final redactors to create a unified text, the composition of the Hebrew text and the Greek translations demonstrate that the oracle against Elam went through different redactional stages. As a result, the final Hebrew text cannot be connected with any historical event; it alludes rather to various historical situations and events, of which only some can be reconstructed from the extant extra-biblical sources.

The first indirect allusion to a historical situation can be observed in Jer 49:37b, 38b, “I will bring disaster upon them, my fierce anger, says the LORD. I will send the sword after them, until I have consumed them; ... and destroy their king and officials.” The vocabulary of these two verses reflects that of the fall of Judah (2 Kgs 21:12; 25:18–21) and thus alludes to the complete destruction of Elam. Despite several attempts to conquer Elam, only Ashurbanipal succeeded in breaking down its resistance and looting Susa. His sword followed the Elamite rebels all around the country and reduced the flourishing kingdom to ruins. These two verses of Jeremiah allude to the final phase of the destruction of Elam, when the rebellious king and his princes were removed. The whole country was filled with blood and the survivors endured looting and deportation.

The second allusion is intrinsically connected with the addition of the superscription in Jer 49:34, missing in Greek, “The word of the LORD that came to the prophet Jeremiah concerning Elam, at the beginning of the reign of King Zedekiah of Judah.” Since Zedekiah became king in 597 BCE, the superscription connects the fall of Elam with the Neo-Babylonian period. Similarly other superscriptions preserved in Hebrew (Jer 46:1–2, 13, 25–26; 47:1) connect the oracles against the nations explicitly with the Neo-Babylonian period. The Babylonian Chronicle (*ABC* 5 r. 16’ – 20’) refers to Nebuchadnezzar’s campaign along the river Tigris dated to 596/595 BCE, which would correspond to the early years of Zedekiah, since the expression *bārē’šīt malkû* “at the beginning of the reign” can refer to the beginning of Zedekiah’s reign, not only to his ascension year (Lundbom 2004: 362). The damaged lines of this chronicle read, “In the ninth year (596/595), the month of [...] the king of Akkad and his troops marched along the bank of the Tigris [...] the king of Elam [...] the king of Akkad [...] which is on the bank of the Tigris he pitched his camp. While there was still a distance of one day’s march between them, the king of Elam was afraid and, panic falling on him, he returned to his own land.” It is difficult to reconstruct the details of this campaign, but it can be safely concluded that Nebuchadnezzar pitched his camp on the bank of the Tigris, while marching

against a coalition of rebels, among whom was also the king of Elam. The Elamite king, seeing the Babylonian troops approaching, was struck with panic and escaped (Keown et al. 2002: 342). A similar situation is vividly depicted in Jer 49:37: “I will terrify Elam before their enemies, and before those who seek their life.”

The final verses of the oracle mention the restoration of Elam: “I will set my throne in Elam ... But in the latter days I will restore the fortunes of Elam” (Jer 49:38a, 39). The fortune of Elam was radically changed during the Persian period when it became the heart of the Persian empire. The independent Elamite kingdom, devastated by the Assyrians and only partially resurrected during the Neo-Babylonian period, completely lost its independence in 540 BCE when it was fully incorporated into the Persian administrative orbit and became the province of Susiana. Besides any religious meaning, the phrase “I will set my throne in Elam” could be taken as a reference to the importance of the city of Susa during the reigns of Cambyses II (530–522 BCE) and Darius I (522–486 BCE). In this period, the city of Susa was rebuilt anew and became one of the capitals of the Persian empire. In the light of Isa 44:28; 45:1, 13, Cyrus II, the real founder of the Persian empire, was *YHWH*’s shepherd. *YHWH* brought him to power and anointed him. In this post-exilic interpretation of Persian history “to set up God’s throne”, besides God’s sovereignty over the world, could allude to the rise of the Persian empire. In this new political setting, the whole oracle assumes a new meaning. The destruction of Elam now refers to Cyrus’ defeat of Elam in 540 BCE, and the restoration of Elam refers to the flourishing of the province of Susiana under the Achaemenid dynasty.

The last level of interpretation of Elamite history is given in the Greek translations. The Septuagint changes the order of the oracles and eliminates some historical notes by means of which the Masoretic Text situated the fall of Elam in the context of the Neo-Babylonian expansion. The Greek translators operated within a new historical context in which Elam was part of the Parthian Kingdom, the successor of the Seleucid empire (Holladay 1989: 314). For the Greek translators, the Parthian kingdom (Elam) was not a distant kingdom but was the key power, more important than Egypt and Babylonia. Consequently, the fall of Elam is an indirect prophecy of the fall of the Persian empire and the rise of the Parthian kingdom.

In sum, the oracle against Elam in Jer 49 does not refer to one historical event but telescopes various events and periods of Elamite history, starting with the Assyrian conquest and ending with the Parthian Kingdom. Seen from this viewpoint, the oracle against Elam summarized the different historical events and the political situation in Elam during the first millennium BCE. The final redactor of the Greek and Hebrew texts, following literary techniques typical of the post-exilic period (Ben Zvi and Levin 2012), skillfully reshaped the history of Elam to create a parallel story to the downfall(s) and rise(s) of Israel and Judah.

Post-Exilic Period: Elam – destination of Israelite and Judean deportees

If Elam participated in the destruction of Israel and Judah, it is only logical to expect that some deportees ended up in Elam. Several biblical texts refer to Israelites living as deportees in Elam, and there are a few notes in the Bible mentioning that the exiles would return from Elam to Jerusalem. The analysis of the biblical and other documents, however, shows that whereas there were almost no Israelite and Judean exiles in Elam in the Neo-Assyrian and Neo-Babylonian periods, the presence of Jewish settlers in Susiana (Iran) from the Persian period until now is well attested.

Jewish deportees in Elam in the Neo-Assyrian and Neo-Babylonian periods?

Besides 2 Kgs 17–18 and 24–25, the Bible contains several notes on exiles (Ezek 20:23, 34; 22:15; 28:25; 34:6; 36:19; Isa 11:11; 43:5–6; 60:4, 9; 66:20; Jer 29:14; 30:11; Zech 2:1–4; 10–11; 8:7; Esther 2:5–6; 3:8; Ezra 2; Neh 2:1). Analyzing these texts, H. Wildberger (1991: 492) concluded that the Jews were living in Elam from ancient times. Indeed the later texts (Esther, Daniel, Ezra and Nehemiah) indisputably refer to Elam as the place where Jewish exiles lived. On the contrary, according to 2 Kgs 17–18; 24–25, Jeremiah, and Ezekiel, the Israelites and the Judeans were not deported to Elam during the Assyrian and Babylonian deportations. Prosopographical studies also corroborate this conclusion. In the Neo-Assyrian and Neo-Babylonian periods, the presence of Israelite and Judean names is attested in Assyria and Babylonia (Oded 2000: 92–103) as well as in Media (Zadok 2004: 100–106), but no west-Semitic names are attested in Elam at this time (Zadok 2004: 103–106) and only one in northwestern Iran *Ū-ri-ia-a* (Zadok 2002: 96). This analysis shows that during the Neo-Assyrian and Neo-Babylonian periods, the deportation of the Israelites and the Judeans to Elam was limited or non-existent. Since Media and Babylonia bordered Elam, and the Israelites and Judeans were deported to these regions, it is possible that some exiles could have passed into the hands of Elamites.

The redactional analysis of the most important note referring to the exiles in Elam (Isa 11:11) confirms the previous conclusion. The verse reads *On that day the Lord will extend his hand yet a second time to recover the remnant that is left of his people, from Assyria, from Egypt, from Pathros, from Ethiopia, from Elam, from Shinar, from Hamath, and from the coastlands of the sea* (NRSV). Similar toponyms are arranged in Isaiah in various order. Since Assyria and Egypt are the first two toponyms of Isa 11:11 and also occur in verse 11:16, most commentators agree that these two names belong to the original stratum and that the rest of the toponyms are later additions. The city of Hamath mentioned in this list creates a problem because there is no evidence that Jews were ever exiled there (Watts 2005: 215–216). In brief, according to the earlier stratum, the exiles would return only from Egypt and Assyria, while in the later expansion of the text dated to the post-exilic period, the exiles returned also from

Elam and other countries (Blenkinsopp 2000: 267). It makes sense to conclude that Elam was not the primary destination of Israelite and Judean exiles during the Neo-Assyrian and Neo-Babylonian periods. Furthermore, the reference to exiles in Elam found in Isaiah belongs to a later period.

Jews in Elam during the Persian and later periods

Elam is known in post-exilic biblical literature, but here it is possible to observe a significant difference in the vocabulary used for referring to and depicting the Elamites and Elam. The post-exilic texts use three terms to refer to Elam: Elam, Susa, and Elymias/Elymeans, the differences between which are far from being clear. The books of Ezra, Nehemiah, and Daniel used both Elam and Susa and seemed to distinguish between both toponyms. If the expression *dhw'* in Ezr 4:9 is read as *dhy'*, then Ezra's list distinguishes the inhabitants of Susa from the Elamites. Ł. Toboła came to a similar conclusion when analyzing both terms in Dan 8:2 (Toboła 2013: 76–80). In 1–2 Chronicles, the term Elam is used exclusively as an eponym or as a personal name, but no longer as a toponym. Moreover, neither the Hebrew nor Greek version of Esther employed the term Elam. Both versions use exclusively the toponym Susa. Later Hellenistic sections of the Bible abandoned the terms Elam and Susa, preferring the terms “Elymais”, “Elymeans” in referring to Elam (Tob 2:10; Jdt 1:6; 1 Macc 6:1). Finally, Josephus reserved the term Elam for the eponym in the table of nations, and in the rest of his work he used only Susa (*Ant.* 10:269, etc.) and Elymais (*Ant.* 12:354–355).

This suggests that the vocabulary used for referring to Elam and Elamites underwent change. In the texts that originated in the pre-exilic period, such as Genesis, Isaiah, Jeremiah, and Ezekiel, the biblical writers used Elam exclusively, never Susa or Elymais. The early post-exilic books, such as Ezra, Nehemiah, and also Daniel, employed both Elam and Susa; however, the authors seemed to distinguish between the two. Later historiographical and hagiographical works used Elam exclusively as an eponym or a personal name. They abandoned the toponym Elam, preferring Susa and Elymais (Josephus, Maccabees, Esther, Tobit, Judith).

Not only the vocabulary, but also the main characteristics of Elam changed. Whereas in the earlier biblical texts (Genesis, Isaiah, Jeremiah, Ezekiel) Elam was praised and feared for its military power, the attitude towards it changed in the books dated to the post-exilic period. From the Persian period onwards, Elam and its capital Susa became one of the most important Jewish settlements. According to Ezr 2:7.31; Neh 7:12.34, from among the numerous Jews living in Iran, a total of 2,508 returned to Jerusalem (cf. also *Ant.* 10:269, 272). These texts present Elam/Susa/Elymais as the most important place in which the Jews lived, thrived, and even reached high positions on the political and cultural ladder. Elam and Susa are no longer presented as military powers but rather as thriving economic, political, and cultural hubs. This

perception is in particular emphasized in the Book of Esther (Est 1:1; cf. also *Ant.* 11:220) and partly also in Daniel (8:2) and in Nehemiah (1:1). The plot of the Book of Esther is situated in Susa, where the Jews faced a new cultural and religious milieu. The problems between the Jews and the inhabitants of Susa in Esther did not take the form of military conflict but assumed the equally detrimental form of diplomatic intrigues characteristic of the Persian and Hellenistic royal courts.

Since the Bible does not mention deportations of Israelites and Judeans to Elam, the presence of numerous Jews in Susa (Est 2:5; 9:6.15) during the Persian and later periods caused problems for the ancient Jewish historiographer Josephus. To explain the Jewish presence in Elam, he indicated that some Jews had moved from Babylon to Susa (*Ant.* 11:204).

Finally, the term Elam appears once in the New Testament, in Acts 2:9. The Greek uses a special form Ἑλαμίται that has its corresponding form in Αἰλαμίται in the Septuagint. The form Αἰλαμίται is also unusual in comparison with the more common term Αἰλαμ for Elam. The term Αἰλαμίται occurs only in Isa 11:11; 21:2; 22:6. A proposal that this is a list based on Paulus Alexandrinus's *Rudiments in Astrology* is no longer followed (Barrett 2004: 121). A more similar list appears in Josephus (*Apion* 2:228; *War* 2:398; *Ant.* 14:114–118). Luke, who often used Septuagint terminology, takes this Isaianic term, underlining that the Pentecostal events are in parallel with the return of exiles to Jerusalem (Isa 11:11). However, similar lists are widely attested and, by introducing people from exotic nations among which there are also the Elamites, the passage conveys “the capacity of the gospel to address all sorts and conditions of people in their own terms” (Pervo 2009: 66).

Abbreviations

ABC Grayson, A.K. 1975. *Assyrian and Babylonian Chronicles*. Locust Valley: Augustin.

Bibliography

- Andreasen, N.-E.A. 1980. Genesis 14 in its Near Eastern Context. In: Hallo, W.W., White, J.B. and Evans, C.D. (eds.) *Scripture in Context I: Essays on the Comparative Method*. Pittsburgh, PA: The Pickwick Press, 59–77.
- Barrett, C.K. 2004. *A Critical and Exegetical Commentary on the Acts of the Apostles*, International Critical Commentary. London – New York: T&T Clark.
- Ben Zvi, E. and Levin, C. 2012. *Remembering and forgetting in Early Second Temple Judah*. Tübingen: Mohr Siebeck.
- Beuken, W.A.M. 2007. *Jesaja 13–27*, Herders Theologischer Kommentar zum Alten Testament. Freiburg – Basel – Wien: Herder.
- Blenkinsopp, J. 1992. *The Pentateuch: An Introduction to the first five books of the Bible*. New York: Doubleday.

- . 2000. *Isaiah 1–39. A New Translation with Introduction and Commentary*, 1st ed., The Anchor Bible 19. New York: Doubleday.
- Block, D.I. 1998. *The Book of Ezekiel: Chapters 25–48*. Grand Rapids, MI: Eerdmans.
- Brinkman, J.A. 1986. The Elamite-Babylonian Frontier in the Neo-Elamite Period, 750–625 BC. In: De Meyer, L., Gasche H. and Vallat F. (eds.) *Fragmenta Historiae Elamicae: Mélanges offerts à M. J. Steve*. Paris: Editions Recherche sur les Civilisations, 199–207.
- Cross, F.M. 1998. *From Epic to Canon: History and Literature in Ancient Israel*. Baltimore, MD: Johns Hopkins University Press.
- Dubovský, P. 2006. Tiglath-pileser III's Campaigns in 734–732 B.C.: Historical Background of Isa 7, 2 Kgs 15–16 and 2 Chr 27–28. *Biblica* 87: 153–170.
- . 2013. Dynamics of the Fall: Ashurbanipal's Conquest of Elam. In: de Graef, K. and Tavernier, J. (eds.) *Susa and Elam: Archaeological, Philological, Historical and Geographical Perspectives: Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. Leiden – Boston: Brill, 451–470.
- . 2014. Why Did the Northern Kingdom Fall According to 2 Kings 15? *Biblica* 95: 321–346.
- . 2016. Suspicious Similarities. A Comparative Study of the Falls of Samaria and Jerusalem. In: P. Dubovský, D. Markl and J.-P. Sonnet (eds.) *The Fall of Jerusalem and the Rise of Torah*. Tübingen: Mohr Siebeck.
- Glissmann, V. 2009. Genesis 14: A Diaspora Novella. *Journal for the Study of the Old Testament* 34: 33–45.
- Granerød, Gard. 2010. *Abraham and Melchizedek: Scribal Activity of Second Temple Times in Genesis 14 and Psalm 110* (Beihefte zur Zeitschrift für die alttestamentliche Wissenschaft 406). Berlin: De Gruyter.
- Holladay, W.L. 1989. *Jeremiah 2: A Commentary on the Book of the Prophet Jeremiah, Chapters 26–52*. Philadelphia: Fortress Press.
- Kallai, Z. 1998. *Biblical Historiography and Historical Geography. Collection of Studies*, Beiträge zur Erforschung des Alten Testaments und des Antiken Judentums. Frankfurt am Main: Peter Lang.
- Keown, G.L., Scalise, P.J. and Smothers, T. 2002. *Jeremiah 26–52*, Word Biblical Commentary. Dallas: Word Incorporated.
- Lundbom, J.R. 2004. *Jeremiah 37–52. A New Translation with Introduction and Commentary*, The Anchor Bible 21C. New York: Doubleday.
- Malamat, A. 2001. *History of Biblical Israel. Major Problems and Minor Issues*, Culture and History of the Ancient Near East 7. Leiden – Boston, MA: Brill.
- McKane, W.F.B.A. 1996. *A Critical and Exegetical Commentary on Jeremiah*, vol. II. Edinburgh: T. & T. Clark.
- Morschauser, S. 2013. Campaigning on Less Than a Shoe-String: An Ancient Egyptian Parallel to Abram's 'Oath' in Genesis 14.22–23. *Journal for the Study of the Old Testament* 38: 127–144.
- Oded, B. 2000. The Settlements of the Israelite and the Judean Exiles in Mesopotamia in the 8th–6th Centuries BCE. In: Galil, G. and Weinfeld, M. (eds.) *Studies in Historical Geography and Biblical Historiography. Presented to Zecharia Kallai*. Leiden – Boston, MA: Brill, 91–103.
- Pervo, R.I. 2009. *Acts: A Commentary, Hermeneia*. Minneapolis, MN: Fortress Press.
- Sarna, N.M. 1989. *The JPS Torah Commentary: Genesis*. Philadelphia – New York – Jerusalem: The Jewish Publication Society.

- Toboła, Ł. 2013. "In the Citadel of Susa in the Province of Elam": The Chronological Significance of the Topographical Annotation in Daniel 8:2. *The Polish Journal of Biblical Research* 12: 71–84.
- Watts, J.D.W. 2005. *Isaiah 1–33 (Revised Edition)*, Word Biblical Commentary. Nashville, TN: Thomas Nelson.
- Wenham, G.J. 1987. *Genesis 1–15*, Word Biblical Commentary. Waco, TX: Word Books.
- Westermann, C. 1981. *Genesis 12–36: A Commentary*. Minneapolis: Augsburg Publishing House.
- Wildberger, H. 1991. *Isaiah 1–12: A Commentary*, translated by Th.H. Trapp. Minneapolis, MN: Fortress Press.
- Zadok, R. 2002. *The Ethno-Linguistic Character of Northwestern Iran and Kurdistan in the Neo-Assyrian Period*. Old City of Jaffa: Archaeological Center Publications.
- . 2004. Israelites, Judeans and Iranians in Mesopotamia and Adjacent Regions. In: Ellens, J.H., Ellens, D.L., Knierim, R.P. and Kalimi, I. (eds.) *Theological and Cultural Studies in Honor of Simon John De Vries*, God's Word for Our World 2. London – New York: T. & T. Clark International, 98–127.

CHAPTER THREE

France and Elam



*Nicole Chevalier**

“But Elam, ancient, true Elam, famous rival of Babylon and Nineveh, was still sleeping underground and had not yet spoken.”

Father Vincent Scheil 1911

On March 8, 1911, in a lecture on “The excavations and the history of Babylonia, Assyria and Elam”, Father Vincent Scheil, the epigraphist of the *Délégation scientifique française en Perse*, described the state of knowledge about Elam before the research initiated at Susa in 1897. In a tradition dating back to Paul-Emile Botta, Fulgence Fresnel and Ernest de Sarzec, Scheil stressed that after having “revealed the archives of the old world at Nineveh, at Babylon, at Telloh”, France again, through its excavations at Susa had “the ever growing and most envied honour of resurrecting the history of Elam, starting from its remotest origins”. With these patriotic remarks made to the *Comité de l’Asie française* – a group of political and economic influence established ten years earlier – Scheil introduced his presentation on the recent progress in the field of Elamite studies since France had obtained the monopoly on excavations in Persia in 1895 (Scheil 1937: 46).

When it began its research, the *Délégation* was not the first to have been interested in the ancient Elamite city of Susa. During the 19th century, several travellers, mainly English, had visited the ruins, but the few remains they spotted could not yet be identified.¹ Subsequently two missions – one supported by Britain and the other by France – undertook research which was mainly concerned with the Achaemenid period. Certainly some Elamite remains were discovered, but they were too modest to reveal much, as evidenced by the huge and thoroughly documented *Histoire de l’art dans l’antiquité* by Georges Perrot and Charles Chipiez, whose volumes on oriental antiquities published between 1884 and 1890 ignore the civilization of Elam: Father Scheil’s “true Elam” remained to be discovered.

For a long time, France did not appear to be in the best position to make Susa and Elam a privileged subject of study. Although the English were able to visit Susiana, Charles Texier in 1838, then architect Pascal Coste and painter Eugène Flandin in 1839–1840 – amongst the rare

Frenchmen to visit Persia – were unable to enter this region, which was regularly subject to tribal revolts. The meagre data and poor drawings obtained by Coste and Flandin from Baron de Bode, counsellor at the Russian embassy, were not published and probably helped to soften their regrets.

However, the two missions, the first from Britain and the second from France, opened the road to the latter for further research in Elam. Explorations between 1850 and 1852 at the location of the Elamite city of Susa by Colonel Williams and William Kennet Loftus did not give the results expected by H.C. Rawlinson, who supervised excavations in Mesopotamia for the *Trustees of the British Museum*. They were prematurely halted in April 1852 when Loftus transferred his efforts to more promising Mesopotamian sites (Loftus 1857: 317–433; Curtis 1993: 15; 1997: 45). However, the success of the mission of Marcel Dieulafoy (1885–1886), magnified by the display of the remains of Persian kings at the Louvre, prompted France to continue research, driven by the fear of seeing Britain, in spite of its earlier lack of interest, asserting a “right of priority” over the site.

The first French at Susa: the mission of Marcel Dieulafoy and the journey of Jacques de Morgan

It was only in the late 19th century during the journey undertaken by Marcel and Jane Dieulafoy through Persia and Mesopotamia (February 1881–April 1882) that France became truly interested in Persia, and Susa in particular. An engineer from the *Ponts-et-Chaussées*, passionate about the connections between Oriental and Western art, Dieulafoy was finally able to visit Susa on 14 January 1882. Immediately he was convinced of its interest and wished to start excavations. On his return to France, his friendship with Louis de Ronchaud, director of the *Musées Nationaux*, helped further his project. Thanks to the latter and to the Ministry of Education, he obtained funding, modest but sufficient, to be able to carry out the work. It remained for René de Balloy, representative of France in Tehran, to obtain a *firman* from Nasr ed-Din Shah authorizing research in this insecure region of Khuzestan. The *firman* was granted on December 7, 1884, not without difficulty. Thus was established the groundwork that enabled French scholars to settle in Susa for the long term.²

When on February 26, 1885, Marcel Dieulafoy (1844–1920), accompanied by Jane and two assistants – Charles Babin, engineer at the *Ponts-et-Chaussées* and Frédéric Houssaye, a naturalist – arrived at Susa, his main goal was to resurrect the “Achaemenid palaces, where Greece, Egypt and western Asia had brought their tribute and their treasures” [Figure 3.1] (J. Dieulafoy 1888: 2). During the first campaign (February 26, 1885–May 13, 1885), after conducting a topographic survey with Babin (M. Dieulafoy 1893, Pl. II)³ and recognising the *apadana* (audience hall), of which Loftus had made the first plan, Dieulafoy dug several

trenches in the *Apadana* mound and at various points of the *Acropole* and *Ville Royale* mounds (M. Dieulafoy 1885a: 57; 1893: 424; 1913: 2–3).⁴ During the second campaign (December 15, 1885–1886), for reason of lack of funds and especially time, he focused his efforts on the *Apadana* mound and completed his work in haste. Indeed, the mission became for various reasons a cause of concern for the Persian government, which had requested the end of the excavations since June 1885, saying they could not guarantee the safety of the French archaeologists: the presence of Christians near the tomb of Daniel was provoking irritation in the population. Finally, the Shah reluctantly agreed to one last campaign which was not to exceed four months. Despite the shortened work, when the cruiser *Le Sané* loaded the latest discoveries, France could be proud of the results. The presentation of the finds, including the frieze of lions, the archers and the monumental bull capital, opened on June 6, 1888 by President Carnot at the Louvre, was the striking proof.



[Figure 3.1 Jane and Marcel Dieulafoy, Frédéric Houssaye and Charles Babin at Susa 1885 \(after Dieulafoy J. A Suse. *Journal de fouilles* 1888: 239\).](#)

However, even if the results were decisive for the Persian period, by digging trenches that did not exceed four metres in depth Dieulafoy did not succeed in bringing Elamite Susa to light; although he did discover some objects older than the Achaemenids. Like Loftus, he brought back terracotta figurines, some dating to the second half of the 2nd millennium (Curtis 1993: 44, Pl. 9; 1997: 43, Figure 26; M. Dieulafoy 1893: 435) and inscribed bricks from Susa and Bandar-Bushehr acquired from Joseph Malcolm, whom he had met during his first

trip to Persia (J. Dieulafoy 1887: 515; M. Dieulafoy 1893: 308–309, 311, Figure 193; 1913: 26). Eugène Ledrain and Jules Oppert translated the inscriptions “despite the immense difficulties of deciphering the Susian texts” (M. Dieulafoy 1893: 308, n. 1).

Despite this success, the future of the excavations at Susa was uncertain because the Shah opposed the resumption of work that would disturb the local population. Above all, he was offended by the attitude of Dieulafoy, who ignored the terms of the *firman* concerning the sharing of discoveries. The *Direction des Beaux-Arts* which supported the excavations, the French legation in Tehran and Dieulafoy all shared the same concern: that if France agreed to the suspension of work, it did not renounce the rights it believed it had according to the *firman* that had been obtained. So for almost ten years, the Shah denied not only any request for excavations at Susa but also for requests for excavations in the whole of Persia, as evidenced by the exploration carried out by Jacques de Morgan (Morgan 1997: 249–327).

The journey undertaken by Morgan between 1889 and 1891 is a milestone in the history of the discovery of Elam by France. Firstly, it enabled the French legation in Tehran to fully appreciate the interest of Susa and actively engage in negotiations. Secondly, it would reveal a man with vast scientific expertise who could offer an alternative to Dieulafoy, who was experiencing difficulties with the Shah. Finally, when he visited Susa, Morgan was mainly interested in Elamite remains.

By training, Morgan (1857–1924) was a geologist and an engineer who studied at the *École des Mines*; his great love was for prehistory; but he was also an ethno- logist, naturalist and numismatist. The diversity of his interests and skills explains his desire to add, when conducting research in Persia, scientists from different disciplines, linking archaeology with all sciences that could help to comprehend the evolution of man. Thus, in those pioneering days he was, as Pierre Amiet (1988: 16; 1997a: 94) put it, “the architect of a global history of the oldest Oriental Antiquity”.

It was during this trip that Morgan, whose beginnings as an oriental archaeologist were recent, became interested in Elam. During his stay in the Caucasus (1887–1889), where he undertook an extensive exploration and study of prehistoric cemeteries, he decided to abandon definitively his engineering career to devote himself to archaeo-logy. On his return to France, he was recognised as “a fervent archaeologist, a skilled excavator, an outstanding draftsman, whose exceptional skills could be happily employed in some special trip” (Chevalier 2009a: 92). It was in this favourable context that he obtained funding for a vast exploration in Russia, the Ottoman Empire and northern Persia.

In Russia, as in the Ottoman Empire, Morgan was unable to carry out the programme decided upon in Paris. Similarly in Persia, where he was to explore the region of Astarabad, Mazandaran and Gilan, he did not obtain permission to carry out excavations. Also, in April 1891, after going in the Mukri region of Kurdistan, which he mapped for the future Mozzafer ed-Din Shah, to Hamadan and the District of Zohab, he decided to remain in Persia. He

traversed the regions of Pusht-e Kuh and Lorestan to reach Khuzestan: his goal was Susa. When on September 2, 1891, he reached Dizful, Morgan drew up a geographic, ethnographic and linguistic map of the area. Above all, he had undertaken “the comprehensive study of the countries which formerly were part of Elam and the border regions of the kingdom”. He was able to draw the “archaeological map of Elam”: “I made this map as complete as possible in terms of geography, I have marked all the ancient remains, tepes, tells, ruins, stelae, tombs etc ... All roads, paths, sources, so I hope through it to determine the position of the cities mentioned in Assyrian inscriptions” (Morgan 1895 card: Pl. 12; 1997: 310; Chevalier 2009a: 98).

Susa, where Morgan stayed for a week, remained to be studied. Impressed by the height of the mound of the *Acropole* which he estimated to be between 34 and 38 metres above the plain, he imagined the future works: “The mound of the *Acropole* contains stone tools. At the top I found fragments of Arab pottery; in the intermediate levels I encountered debris that I attributed to the Elamite era. Thus, this tell alone contains remains from all ages; we should attack it first to regain the lost history of Elam and not the lower mounds that surround it” (Morgan 1896: 177, Figure 151, 180–181; 1902a: 6). Finally, in the event of the Shah conceding the site, Morgan wrote a report and drafted a plan of the land to acquire for the French legation in Tehran which for five years strived to keep Susa for France.

Scientifically speaking, the mission in Persia, whose results were published between 1894 and 1905, was a success. In the first part of the fourth volume, devoted to “Recherches archéologiques”, Morgan presented a significant “Etude de l’Elam” (Morgan 1896: 173–234). After having defined Elam as consisting of “two distinct parts: Upper Elam, mountainous and almost inaccessible, and Susiana or Lower Elam, formed by alluvial plains, but protected against the Chaldeans by an impassable swamp”, he addressed the issue of language. In this regard, he acknowledged that little is known and that the few known documents are divided “into two categories, archaic inscriptions on the soft clay of bricks, and the more recent texts engraved on the rocks of Mal-Emir”, and referred to the communication of Jules Oppert on “Les Inscriptions en langue susienne”, made in 1873 to the *Congrès des Orientalistes* (Oppert 1876: 179–216). Generally, for civilization as for geography, Morgan based his work on the main source then available: the *Annales des rois d’Assyrie* translated in 1874 by Joachim Ménant. About the “archaeological map” he explains, “I tried to trace on the modern map the various expeditions of Assyria against Elam; relying on texts, I used my knowledge of these regions to deduce the various strategic moves of the Assyrian armies. I do not pretend to have irrevocably fixed the exact position of the cities, but at least I have in this study indicated the progress of expeditions. More detailed research would require surveys in all ancient places, in the many tells that cover both the plain of Susa and the valleys of the mountains of Upper Elam” (Morgan 1895: Pl. 12; 1896: 222).

Another positive point, and not the least, by transmitting maps and a report on the oilfields of Qasr-e-Shirin, Morgan earned the benevolence of the Shah, who gave him the medal of the

Grand Officer of the “Lion and Sun”. On this subject Morgan explains: “Receiving this distinction was very pleasant to me; it shows that my stay in Persia will leave a memory that will facilitate the trips of the missionaries who will come after me” (Chevalier 2009a: 97, 100). However, the French still waited four years before being able to return to Susa.

The French monopoly of excavations in Persia (1895)

After the return of Dieulafoy, France did not envisage taking on research in all the sites of Persia: only Susa was of interest. But at Tehran, Balloy became convinced from 1891 onwards that the acquisition of the rights over the entirety of excavations was the ideal solution that would allow the French to exclude competitors and to work when and where they wished. In 1894, in agreement with Paris, he began negotiations with the Persian government. On May 12, 1895, these culminated in the signing of an agreement through which France obtained, through a payment of 50,000 gold francs, the rights over all excavations in Persia. Finally, five years later during his visit to Paris on the occasion of the *Exposition universelle*, Mozzafer ed-Din Shah – successor of Nasr ed-Din – signed, on August 11, 1900, a new agreement that differed among other things on the issue of the sharing of the finds. The 1895 agreement provided for an equal division of discoveries on the principle of the *firman* of Dieulafoy, with a special status for gold and silver objects that could be bought by France. In the 1900 agreement, the principle of the sharing of objects was to be maintained in all parts of Persia, but those discovered in Susiana were to be entirely assigned to France. It is on this principle that the excavations in Persia functioned until 1927, the date of the termination of the agreement. It is in this very particular context of monopoly that the French Ministry of Education created the *Délégation Scientifique Française en Perse* in 1897 (Chevalier ed. 1997: 76–79). It only remained to choose the man capable of taking responsibility for such an unparalleled institution.

At this time, two men had proved their worth. Dieulafoy, in bringing back Persian antiquities, was at the origin of the Iranian collection of the Louvre. But by attracting the displeasure of Nasr ed-Din Shah, he did not have the support of the French legation. As for Morgan, who had planned to go back to Persia to study the south and east of the country, he was sent to Egypt at the head of the office of Antiquities (1892–1897) where he became renowned for his significant discoveries at Dahshur and Naqadeh, supplemented by the publication of his *Recherches sur les origines de l’Égypte* (1897), in which he laid the foundation for studies on Egyptian prehistory. However, the publication of the first volumes of his *Mission scientifique en Perse* (1894–1905) shows that Persia remained at the centre of his concerns. In Paris, his good relations with the Ministry of Education, responsible for implementing the Convention, and in Tehran, with the French legation and Mozzafer ed-Din, worked in his favour and helped to have him recalled from Egypt. On April 19, 1897, Morgan

was made responsible for directing all archaeological research in Persia under the title of *Délégué général*. On July 21, 1897, the Parliament voted for him to receive a starting credit of 100,000 francs and a sum of 130,000 francs as an annual work allowance.

After his trip to Persia and his stay in Egypt, Morgan believed that Susa held the key to his research: “In the Nile Valley, I had become convinced that the first civilizations, the origin of the Egyptian empire, proceeded from the Chaldeans and that the plains of Mesopotamia were, therefore, the birthplace of human progress. Susa, by its very remote antiquity, presented itself as a solution to the largest and most important problem of our origins. This city, in my opinion, had belonged to the primitive world that had seen the discovery of writing, the use of metals, the beginnings of art. If the problem of origins is ever to be solved, it is in Chaldea and especially at Susa that we need to look for the elements” (Morgan 1902a: 16). With the agreement of the Ministry of Education, Morgan decided to engage in Susa the bulk of the financial and human resources of the *Délégation* in order to conduct their large-scale investigations to reach the most ancient levels. At the end of 1897, the conditions were in place for Elam to become a long-term domain of French research.

The Délégation scientifique française en Perse and Elam (1897–1912)

“It has been said a hundred times and printed that the *Délégation en Perse* at Susa resumed the work carried out by the Dieulafoy mission. This is a mistake I would not have responded to if it had not, by its frequency, become obsessive. The Dieulafoy mission set out to study the Achaemenid period: they focused their efforts on the ruins belonging to that time, leaving untouched the entire area of the Elamite ruins, which is the only object of my works. The palace of Xerxes, Artaxerxes and others, did not affect the choice I made of Susa; it is the history of Elam that I was looking for” (Morgan 1905: 10).

When on December 16, 1897, Morgan arrived at Susa, ten years had passed since the Dieulafoy mission. A small, modestly funded team was replaced by the *Délégation* which had been provided with significant financial and human resources. Yet very quickly it became obvious that France had neither the financial nor human means to implement a monopoly over the entire Persian territory. Despite his efforts, Morgan never managed to increase his budget, which contributed to the restriction of his main focus to the site of Susa during the 15 years of his leadership.

On the 1st of May 1898, the *Délégation* moved to the “Château” built to the north of the *Acropole* to protect the archaeologists against repeated attacks by various tribes [[Figure 3.2](#)] (Morgan 1902a: 54–60; Jéquier 1968: 123–124; Chevalier 2009b: 108–113). The research team consisted of assistants that Morgan had met in Egypt, such as Gustave Jéquier (1897–1902), Joseph-Etienne Gautier (1898–1907) and Georges Lampre, accompanied by his wife (1897–1906). From the beginning, Morgan enlisted especially the skills of Father Jean-Vincent Scheil

(1897–1940), an eminent Assyriologist (André-Salvini 1997) with whom he had already collaborated. In 1891 they published the inscriptions of the stele of Kel-i-Chin, the reliefs of Sheikh Khan and Ser-i-poul, of which Morgan took impressions during his trip to Persia (Morgan 1896: 159–166, 265–274). Later other collaborators appeared, among others, Maurice Pézard (1909–1912), a graduate from the *École du Louvre*. Above all, in 1903 Roland de Mecquenem, a young mining engineer and paleontologist, joined Morgan and from 1908 regularly replaced him in the field (Amiet 1997b; Spycket 1997).

In the first years, the mission operated on a rhythm of two consecutive years in Persia; two excavation campaigns – limited to winter and spring because of the heat – separated by a summer study trip in cooler countries. The following summer, the team returned to France to rest and eventually to occupy themselves with the finds sent to the Louvre and prepare the publications [Figure 3.3]. Indeed, Morgan had anticipated rapid communication of the work within a series inaugurated in 1900: *Mémoires de la Délégation en Perse*. Up to 1912, 13 volumes appeared under his leadership. Scheil was an important contributor. Of the 16 volumes which he published in this collection, eight appeared during the Morgan period; publication of the “*Textes élamites-sémitiques*” and “*Textes élamites-anzanites*” was alternated. Notably, at the end of 1902, Scheil gave the complete copy and translation of the Code of Hammurabi, discovered in December 1901 and January 1902 (*Mémoires* IV 1902: 11–162; André-Salvini 2003: 8–12).

In 1997, in his presentation of the “*Bilan archéologique de la Délégation en Perse*”, Pierre Amiet emphasised how delicate this exercise was; it was likely to lead to a judgement of the institution according to criteria that were not those of the time (Amiet 1997a: 94); this remark is especially true due to the fact that in his time Morgan was considered a skilled excavator (Lagrange 1913: 126).

December 18, 1897, two days after his arrival at Susa, Morgan started his work based on Babin’s plan, the quality of which he thought well of. First, in order to locate the most ancient levels on the southern slopes of the *Acropole*, he dug five galleries with the assistance of a well-digger according to a method that had been successfully tested in Egypt. He also opened 14 trenches: two in the *Ville Royale* in order to study its surface; seven on the *Apadana* to make checks, judging this research to be “of a very secondary interest”; and finally, five on the *Acropole* (*Mémoires* I 1900: 81–110; VIII 1905: 45–51). To clear the rubble, he would use up to 100 Decauville trucks of 300 litres each on tracks and up to 1200 workers at a time (Mecquenem and Amiet 1980: 6). As emphasised by André Parrot, while aspiring to do scientific work, Morgan conceived his excavations as an engineer, according to a method described by him as being “industrial”. Organising a methodical evacuation of the spoil, he divided the 35 metres of the height of the *Acropole* into seven artificial levels by opening trenches in tiers with a height and width of five metres, which took on a vertiginous appearance (Parrot 1946 I: 172, II: 37–39 Figure 1; Mecquenem and Amiet 1980: 8–9; Mousavi

1996: 7–12). In January 1913, the confusion of the architect Maurice Pillet, when at dusk he discovered the tell of the Acropolis, is significant: “I felt as if we walked along high cliffs, or better, high walls [...] I was surprised that Susa had retained such imposing remains of its enclosures [...] but great was my disappointment, when the next day I realized that these superb ramparts were none other than the fronts of attack and clearings of the site, thus during the night I had taken their vertical and regular faces as city walls” [\[Figure 3.4\]](#) (Chevalier 2009b: 258–259).



[Figure 3.2 Jacques de Morgan in the “Chateau” of Susa \(courtesy of photographic archives of the Département des Antiquités orientales, Musée du Louvre\).](#)



[Figure 3.3 Jacques de Morgan and Father Vincent Scheil. “The inventory of the archaeological discoveries from Susa at the Louvre Museum” \(After *L’Illustration*, n° 3075, 1 February 1902: 69\).](#)

The method was radical; but still Morgan never questioned it, even after visiting in 1899 the start of the excavation of Babylon by the Germans and admiring the conduct of their work (Morgan 1902a: 138). Morgan taught his method to his assistants, especially to Mecquenem, who, having arrived at Susa in 1903, put it into practice until the Second World War. Thus Morgan and his collaborators were never able to distinguish and hence reveal the remains of an architecture essentially of mud brick. The consequence was poorly classified and badly interpreted documentation, removing part of the scientific value of the work of the *Délégation*, though quickly made available to scholars through the publication of the *Mémoires*. Nevertheless, the importance of the discoveries, as “artistic” as they were epigraphic, allowed the *Délégation* to rapidly bring Elamite civilisation out of oblivion. Five

years after the work began, Morgan gave a first look at “The history of Elam” in *Revue archéologique* (Morgan 1902b: 149–171).

From the beginning of the excavation of trenches 7, 7α and 15 – under the Parthian and Achaemenid remains and near the ruins of floors and walls “too devastated and too dispersed to give any coherent plan” – was found an exceptional collection of royal monuments, according to some coming from Mesopotamian cities, which had been carried away as booty to Susa by Middle Elamite sovereigns, notably Shutruk-Nahhunte.⁵ In turn were discovered: the obelisk of Manishtusu, the stele of Naram-Sin from the Akkadian period, the Kassite *kudurrus*; later, during the 1901–1902 campaign, the Code of Hammurabi. The *Acropole* excavations also helped to reveal many objects that were among the most remarkable of the Elamite civilization; in particular, from the first campaign, a bronze altar, then the relief of the lady spinning, the bronze of the seven warrior gods and fragments of the stele of Untash-Napirisha. In 1903 the statue of Queen Napir-Asu [Figure 3.5] and in 1905 the *Sit Shamshi* were discovered inside and near the temple of Ninhursag, excavated along with the Inshushinak temple under which was found in 1904 a collection of very diverse valuable objects described as “foundation offerings”. Five years after the start of the excavations the most important discoveries of the *Délégation* were presented to the public at the *Grand Palais des Champs-Élysées* in 1902 and the *Louvre* in 1905 (Morgan 1902a; Morgan 1905).⁶



[Figure 3.4 The *Acropole* and the “Château” of Susa in 1913 \(photograph by Maurice Pillet; courtesy of photographic archives of the Département des Antiquités orientales, Musée du Louvre\).](#)



[Figure 3.5 The statue of Queen Napir-Asu in the “Château” of Susa, January 1903 \(courtesy of photographic archives of the Département des Antiquités orientales, Musée du Louvre\).](#)

The excavations were conducted starting from the summit of the *Acropole* in order to remove the entire surface. However, anxious to reach the remains of the origins of the site quickly, Morgan led the excavations deeper into the “*Grande tranchée*”. Thus in 1901 were discovered documents that were written in an archaic script called “Proto-Elamite”. Then, after bypassing a sterile mass of earth whose nature was not elucidated until much later, in 1906–1907 virgin soil was reached, revealing a large prehistoric cemetery which contained particularly fine painted ceramics and various copper objects, which implied a more recent date than that expected by Morgan.

Alongside the Susa excavations, the *Délégation* conducted surveys in several regions. In the Elamite domain, in his first summer trip in the Bakhtiari mountains, Morgan resumed the

program of taking impressions of reliefs and inscriptions that he had started in 1890. Thus, from October 8–14, 1898, he drew and Jéquier took impressions of the Elamite reliefs and inscriptions of Malamir. Known to early travelers (Vanden Berghe 1963: 22–23), these reliefs had already attracted Dieulafoy's interest. In 1885 he had sent Houssaye and Babin to photograph them (M. Dieulafoy 1885b: 225–227, Pl. XXIV; 1890: 33). In 1901 the *Délégation* proposed a comprehensive review of the reliefs and study of the inscriptions by Scheil, which would long remain the main source of knowledge about these reliefs (*Mémoires* II 1901: 102–132, 133–143). Finally, in 1902–1903 J.-E. Gautier, independently, but under the aegis of the *Délégation*, carried out a mission in the Deh Luran plain northwest of Susa. In the tepes of Mussian, Ali-abad and Khazineh were discovered a collection of archaic painted shards (*Mémoires* VIII, 1905: 59–148).

The concentration of efforts at Susa, caused in part by the priority given by Morgan to Elamite studies, added fuel to the criticism concerning the overly limited scope of the *Délégation*. Although Susa was at the origin of diplomatic action of France, the extent of the monopoly meant having to diversify the investigations. In 1908, recognizing the importance of the results, the *Légation de France*, keen to defend an agreement increasingly considered controversial by the Persians and foreign scholars who felt they were being ousted, was alarmed by these attacks and denounced the lack of research outside Susiana. Thus Morgan, criticised for his scientific choices, which he justified by the importance of the excavated site, and with insufficient financial resources to allow the expansion of research to other regions without undermining Susa; challenged by some of his collaborators; suspected of irregularities in his financial management; disappointed, perhaps, by an excavation that had become too routine and that he had entrusted from 1908 to Mecquenem; but, above all, exhausted and ill, gave in his resignation on October 12, 1897.

The Mission archéologique de Susiane (1912–1946)

On November 21, 1912, a month and a half after the resignation of Morgan, the *Délégation* was officially dissolved. From then on, it was in Paris, within the *Commission consultative des fouilles en Perse*, created in 1908, that decisions were made on the direction of research. Immediately, the Commission reckoned that independent missions would give better results. Thus, Henri Viollet's project on the study of Islamic monuments was authorized, and Charles Fossey was charged with a mission to Hamadan and Rey. Research work at Susa, although financially restricted, was not called into question. In this context, Scheil and Mecquenem were jointly appointed to lead the *Mission archéologique de Susiane*; Scheil in Paris as scientific director – a position he held until his death in 1940 – and Mecquenem at Susa as director of excavations until 1946.

From now on, the Susa team was smaller; Maurice Pézard departed but made a significant

contribution to the Susa excavations by publishing in 1913 with Edmond Pottier, curator at the Louvre, the catalogue of Susiana Antiquities discovered by the Morgan mission (Pézard and Pottier 1913/1926). The same year he obtained permission to excavate at Bandar-Bushehr, ancient Liyan, which he briefly explored with his brother Georges. The results were modest – mainly Middle Elamite bricks and painted ceramics of the “1st and 2nd styles” – but nevertheless published (*Mémoires* XV 1914). On March 24, 1914, Mecquenem ceased his work: he had to wait six years before returning to Susa for a brief inspection of the site, occupied since 1916 by British troops.

When Mecquenem returned to Susiana in spring 1920, the archaeological situation of France in Iran was in a period of change.⁷ Contested before the war, the monopoly was becoming difficult to defend and a long negotiation started with Iran. Finally, on October 18, 1927, France renounced the monopoly. In return, the post of *Direction générale des antiquités, bibliothèque et musée* was assigned to someone from France. Regarding the sharing of objects, the Susa mission would now become subject to new regulations. André Godard, Director of Antiquities from 1928 to 1960, had the task, among others, of establishing these regulations [Figure 3.6] (3 November 1930).

In 1921, the *Acropole* being virtually inaccessible until the destruction of the barracks housing a squadron of Sepoys, the excavations were actively pushed over to the tell of the *Apadana* [Figure 3.7]⁸ Until 1926, Mecquenem conducted his work principally in two directions: the completion of the uncovering of the Achaemenid palace – for him, this objective was achieved in 1922 – and the identification of underlying Elamite remains – already begun in the east in 1912 – and which he continued under the pavement of the courtyards. Thus he discovered a set of graves, arranged under the floor of houses, identified by him as an “Elamite necropolis” and the remains of a temple with its moulded brick decoration of the second half of the 2nd millennium. Then from 1927, next to the *Acropole*, which was still being excavated but less intensively than before the war, efforts were focused on the southwest of the *Ville Royale* – where in the tombs were found large clay heads of the Middle Elamite period – and in the *Donjon*. Finally, Mecquenem broadened the scope of the mission by carrying out in the 1930s a series of surveys on various prehistoric sites of Susiana: notably with Louis Le Breton. Above all, he helped to broaden the field of Elamite studies by carrying out, from 1935, surveys about 40 kilometres southeast of Susa at the site of Chogha-Zanbil, discovered by geologists of the Anglo-Iranian Oil Company after they flew over it in an aeroplane. With Jean Michalon, architect, he thus revealed ancient Dur-Untash: an ephemeral city built by Untash Napirisha (*Mémoires* XXXIII 1953).



[Figure 3.6 Yedda and André Godard and Roland de Mecquenem at Susa around 1930 \(courtesy of photographic archives of the Département des Antiquités orientales, Musée du Louvre\).](#)



[Figure 3.7 Family tomb of the Neo-Elamite period. Excavations to the east of the Achaemenid palace \(Susa 1924; courtesy of photographic archives of the Département des Antiquités orientales, Musée du Louvre\).](#)

France and Elam after the Second World War: Roman Ghirshman (1946–1967) and Jean Perrot (1967–1979)

The cessation of work caused by the war coincided with changes in the direction of the excavations at Susa. First of all, after the death of Father Scheil (in 1940), Georges Contenau, curator of Department of Oriental Antiquities at the Louvre, succeeded him as Scientific Director (1940–1957). Furthermore, on October 13, 1945, Roman Ghirshman was appointed by the Foreign Ministry's excavation commission to replace Mecquenem, who would now focus on his publications [\[Figure 3.8\]](#). In early 1946, Mecquenem went to Susa to perform final checks and hand over his powers to his successor.



[Figure 3.8 Roman Ghirshman in front of the inscription commemorating the arrival of Jacques de Morgan 70 years earlier.](#)
[Susa 1967 \(courtesy of Agnès Spycket\).](#)

When Ghirshman (1895–1979) became head of the excavations, he was already an

archaeologist with much experience working at multiple sites, having made his debut at Tello, in Mesopotamia (1930–1931). During the war, he headed the *Délégation archéologique française en Afghanistan* (1941–1943). Before that, he had devoted himself to Iran, where he excavated at Tepe Giyan (1931 and 1932) – in collaboration with Contenau – and at Tepe Sialk (1933, 1934 and 1937). Before the war he also explored Bishapur (1935–1936 and 1938–1941). However, he had never worked at Susa. In the 20 years during which he led the *Délégation archéologique en Iran*, he continued to work at Susa and undertook a complete exploration of Chogha-Zanbil.

On December 4, 1946, resuming work at Susa, Ghirshman attempted to bring some order into the exploration of the site by applying a method, infinitely more reliable, inaugurated at Tepe Giyan and Tepe Sialk. Although personally interested in the most recent periods of the site⁹ – which explains his work in the *Village perse-achéménide*, the *Ville des Artisans* and in the north of the *Ville Royale*, mostly untouched by his predecessors – Ghirshman nonetheless also greatly contributed to bringing to light to the earliest periods of the history of Susa.¹⁰

Even if from the first campaigns various operations took place in the *Apadana*, they remained limited compared to those undertaken in other parts of the site, including the north of the *Ville Royale* with the important stratigraphic project, *Chantier A*, opened from the month of December 1946, which allowed 15 levels to be identified before reaching the virgin soil. It was only in the last six years of his leadership that the oldest levels of Susa were explored: in the *Ville Royale Chantier A*, he uncovered several levels from the time of the *sukkalmahs*, then little known (VRA XII to XV), which allowed the recognition of large residences of royal dignitaries. This stratigraphic sequence was continued further south in *Chantier B*, uncovering three earlier levels, and in the *Acropole*, where under his leadership Marie-Joseph Steve and Hermann Gasche explored the remains of the 3rd and 4th millennia untouched by Morgan and Mecquenem. Thus the existence of the *Haute Terrasse*, artificially constructed at the beginning of the 4th millennium, was identified.

In undertaking work at Chogha-Zanbil, Ghirshman uncovered an ensemble of predominantly religious structures. During the nine campaigns (1951–1962), the following were uncovered: the ziggurat, dedicated to the gods Inshushinak and Napirisha; the courts; several shrines with important material; and a royal quarter with one of the palaces housing the royal tombs and many inscriptions. A large Elamite architectural complex was finally revealed (*Mémoires* XXXIX I 1966; II 1968).

On April 10, 1967, Ghirshman, who had been “for half a century the great master of French archaeology in Iran” (Will 1981: 212), completed his 21st and last campaign of excavations at Susa, passing the baton to Jean Perrot [Figure 3.9]. Seventy years earlier, Morgan had arrived at Susa at the head of the *Délégation scientifique française en Perse*: Ghirshman did not fail to commemorate the anniversary.

In 1967, Jean Perrot (1920–2012), a specialist in the late prehistory of the Near East, took

over from Ghirshman as the head of the *Délégation archéologique française en Iran et de la mission de Suse*. At that time, he had already had a distinguished career. Indeed, after prior training in Paris, he left to study at the *Ecole biblique et archéologique française de Jérusalem*. He met René Neuville, Consul General of France and a prehistorian, whose influence was decisive, and in 1952 Perrot founded the *Mission archéologique française à Jérusalem*.



[Figure 3.9 Jean Perrot and Pierre Amiet in the “Château” of Susa, 1977 \(courtesy of Pierre Amiet\).](#)

Until 1979, Perrot led a large team consisting of archaeologists and environmental specialists from several countries, including Iranian trainees delegated by the Iranian Centre for Archaeological Research, led by Firouz Bagherzadeh.¹¹ His objective was to establish the archaeological sequence of Susiana and Susa from the first villages to medieval times. Work on each period and the publication of results were placed under the responsibility of several archaeologists. For the Elamite period, on the south side of the *Acropole*, stratigraphic control operations were led by Alain Le Brun and Henry Wright, who concentrated their research on the 4th millennium, as well as Denis Canal, for the High Terrace. Elizabeth Carter worked in the *Ville Royale I* on the period covering approximately the 2nd millennium, and Pierre de

Miroschedji worked in the *Ville Royale* II for the 1st millennium to clarify the stratigraphy of the Middle and Neo-Elamite periods. The epigraphic documentation was entrusted to François Vallat.

Finally, as was the case with the first excavations of the *Délégation* led by Morgan, Jean Perrot appeared very anxious to publish early the results of his mission. While in the collection of *Mémoires* the publication of previous findings was not yet complete, the results of the Perrot Mission appear from 1971 in *Cahiers de la Délégation archéologiques en Iran* (*Cahiers de la DAFI*). Fifteen volumes of reports were published. Similarly, papers from the two international “*Rencontres*” in 1977 – at Susa – and in 1985 were published in the journal *Paléorient* 4, 1978 and 11/2, 1985 and translated into Persian.

Elam at the Louvre

In his “*Bilan archéologique de la Délégation en Perse*”, which gave a synthesis of the archaeological activity of Jacques de Morgan, P. Amiet concluded that “they had in fact garnered much; it was premature to coordinate epigraphic and archaeological documentation into an overall history of a very complex civilization. This history depended too much on the history of Mesopotamia to be already mastered” (Amiet 1997a: 107).

Indeed, it was not until the period after the Second World War and Louis Le Breton that French researchers began a first reflection on the huge stockpile of objects at the Louvre. Mecquenem’s collaborator at Susa (1933–1935), researcher and *Chargé de mission* at the Department of Oriental Antiquities (1948), Le Breton classified and catalogued thousands of objects from Susa in the Louvre storage rooms. In particular, he took on the large task of organising the Susa ceramics and tried to reconstruct the complex evolution of the primitive civilization of Susiana. Thus, in 1947, after his *Ecole du Louvre* thesis on “*La céramique peinte de Suse II*” and having published his “*Notes sur la céramique peinte aux environs de Suse et à Suse*” (*Mémoires* XXX 1947: 120–219) in the year of his death, a remarkable synthesis of his research and findings appeared posthumously (Le Breton 1957: 79–124). In many respects, Pierre Amiet, curator at the Department of Oriental Antiquities, resumed the task initiated by Le Breton. Formerly a student of the *École Biblique et Archéologique française de Jérusalem*, Amiet, who had known Mecquenem and benefited at the Louvre from Contenau’s last courses, became rapidly interested in the Iranian world, to which he devoted many articles and several reference books. Thus, less than ten years after the disappearance of Le Breton, to whom he had dedicated his first article on Iran and Susian archaic glyptic, Amiet presented a first synthesis of Elam. Knowing perfectly the Susian antiquities from the excavations of Morgan and Mecquenem, preserved not only at the Louvre but also in Tehran, and the recent discoveries made by Ghirshman, he published *Elam* in 1966. In this synthesis, he considered all of the excavated material and proposed a classification system; as Parrot underlined, he

successfully classified “a considerable documentation into a coherent chronological framework, and this in the absence of any architectural context”. It was only a first step. Twenty years later, in *Suse, 6000 ans d’histoire*, Amiet recognised that this classification had become outdated: on the one hand “subsequent discoveries have often allowed for corrections to be made”; on the other, while he had devoted himself “to highlight Susian originality by using a terminology distinct from that of Mesopotamia”, while examining on site the results of the most recent work in 1977, he “discovered the alternating dependence and independence of Susiana in relation to Mesopotamia, highlighting alternating references to the latter and Elam itself” (Amiet 1988: 11).

In 1978, after more than 90 years of research, the French excavations at Susa were terminated. There remained the important task of publishing the excavations and the study of the collections that had built up in the storage rooms of the Louvre until 1968, when the *Délégation archéologique française en Iran* proposed to the Iranian Minister of Culture the abandonment of the sharing of excavated objects.

Abbreviations

Mémoires Most of the results of the scientific work of the *Délégation scientifique française en Perse* and its successors were gathered in a collection of volumes inaugurated by Jacques de Morgan successively entitled:
Mémoires de la Délégation en Perse, volumes I to XIII, 1900–1912.
Mémoires de la Mission archéologique de Susiane, volume XIV, 1913.
Mémoires de la Mission archéologiques de Perse – Mission à Bender-Bouchir, volume XV, 1914.
Mémoires de la Mission archéologiques de Perse – Mission de Susiane, volumes XVI to XXVIII, 1921–1939.
Mémoires de la Mission archéologiques en Iran – Mission de Susiane, volumes XXIX to XXXVIII.
Mémoires de la Délégation archéologiques en Iran – Mission de Susiane, volumes XXXIX to LII, 1966–1992.

Notes

* Translated from French by Javier Álvarez-Mon and Yasmina Wicks.

1 Including Colonel John Macdonald Kinneir and Major Monteith (1809), Robert Gordon, a member of the William Gore Ouseley embassy (1811), Sir Robert Ker Porter (between 1817 and 1820), Henry Creswicke Rawlinson (1836), Austen Henry Layard (1840) and Baron de Bode (1841).

- [2](#) On the diplomatic and institutional context until 1914, see Chevalier 2002: 118–203; 2010. See also Nasiri-Moghaddam 2004.
- [3](#) It was not until 1954 that a new topographic map was made by A. Jullien and Ghirshman.
- [4](#) For simplicity, to designate the different areas of the site, we use traditional appellations: to the west the *Acropole*; to the north, the *Apadana*; to the east, the *Ville Royale* and in the south the *Donjon*; finally, beyond, further north, the *Ville des Artisans*.
- [5](#) See Mecquenem and Amiet 1980: 6–23. A summary of the findings of the *Délégation* accompanied by the bibliography was given in Amiet 1997a: 94–109. See Martinez-Sève 1997: 18–29 and Gasche, Steve and Vallat 2003: 392–394.
- [6](#) On the site of the major discoveries in the *Acropole*, see the plan of Suzanne Heim and Françoise Tallon in: Harper, Aruz and Tallon 1992: 124, Figure 41.
- [7](#) On the diplomatic and institutional context until 1939: Chevalier 2002: 323–347.
- [8](#) On the work of this period, see Mecquenem and Amiet 1980: 23–48; Amiet 1997a: 162–167; Martinez-Sève 1997: 28–68; Gasche, Steve and Vallat 2003: 394–395; *Roland de Mecquenem. Susa Archives (1912–1939)*, online. For a complete bibliography on the excavations at Susa and the surrounding area, see Steve, Gasche and De Meyer 1980: 107–116.
- [9](#) His interest in the Parthian, Sassanid and Hellenistic periods led him to excavate Ivan-e Kerkha, (1950), from 1964, Bard-e Néchandeh and Masjid-i Suleiman, where he worked until 1972. He also uncovered a Christian monastery at Kharg Island (1959–1960).
- [10](#) Previously, Mecquenem had conducted a series of limited operations in the *Ville des Artisans* under the direction of Jamshid M. Unvala. On the Ghirshman excavations, see Steve, Gasche and Meyer 1980. In the appendix, a summary is given for each campaign, with the active sites and excavated levels; Gasche 1997; Gasche, Steve and Vallat 2003: 396–398.
- [11](#) For an overview of the works of the Perrot mission, see Perrot 1997; Gasche, Steve and Vallat 2003: 398–403 (specifically the location of major projects launched by Ghirshman and Perrot: pp. 399–400).

Bibliography

- For the Roland de Mecquenem Archives, see: N. Daucé, 2011. Roland de Mecquenem Archives de Suse. Rapports de la Mission (1912–1939). Cote conservation: F/17/17256/Document original conservé aux Archives Nationales, Paris. www.mom.fr/mecquenem/.
- Amiet, P. 1966. *Elam*. Auvers-sur-Oise: Archée.
- . 1988. *Suse 6000 ans d'histoire*. Paris: RMN.
- . 1997a. Bilan archéologique de la Délégation en Perse. In: Chevalier, N. (ed.) *Une mission en Perse 1897–1912*. Paris: RMN, 94–109.
- . 1997b. La période Roland de Mecquenem (1912–1946). In: Chevalier, N. (ed.) *Une mission en Perse 1897–1912*. Paris: RMN, 162–187.
- André-Salvini, B. 1997. “Ici commence l’histoire de l’Elam”. L’œuvre du père Jean-Vincent Scheil. In: Chevalier, N. (ed.) *Une mission en Perse 1897–1912*. Paris: RMN, 94–109.

- . 2003. *Le code de Hammurabi*. Collection Solo. Paris: Musée du Louvre édition- RMN.
- Chevalier, N. 2002. *La recherche archéologique française au Moyen-Orient 1842–1947*, Centre de Recherche d'Archéologie Orientale, Université de Paris I: 14. Paris: ERC.
- . 2009a. Le voyage en Perse de Jacques de Morgan (1889–1891). In: Djindjian, F., Lorre, C. and Touret, L. (ed.) *Caucase, Egypte et Perse: Jacques de Morgan (1857–1924) pionnier de l'aventure archéologique*. Cahier du Musée d'Archéologie Nationale 1, 89–101.
- . 2009b. *Chronique des premières missions archéologiques françaises à Suse d'après les photographies et mémoires de l'architecte Maurice Pillet (1912–1913)*. Téhéran: IFRI – Paris: Musée du Louvre.
- . 2010. Les découvreurs du palais de Suse. In: Perrot, J. (ed.) *Le palais de Darius à Suse. Une résidence royale sur la route de Persépolis à Babylone*, Paris: PUPS, 74–115. London-New York: I.B. Tauris & Co Ltd: 2013, 53–91.
- Chevalier, N. (ed.) 1997. *Une Mission en Perse, 1897–1912*. Paris: RMN.
- Curtis, J. 1993. William Kennet Loftus and His Excavations at Susa. *Iranica Antiqua* 28: 1–55.
- . 1997. Les fouilles de W. K. Loftus à Suse. In: Chevalier, N. (ed.) *Une mission en Perse 1897–1912*. Paris: RMN: 36–45.
- Dieulafoy, J. 1887. *La Perse, la Chaldée, la Susiane*. Paris: Librairie Hachette.
- . 1888. *A Suse. Journal de fouilles*. Paris: Librairie Hachette.
- Dieulafoy, M. 1885a. Fouilles de Suse. Campagne de 1884–1885. Rapport de l'ingénieur en chef des Ponts et Chaussées directeur. *Revue Archéologique*: troisième Série 6: 48–69.
- . 1885b. Mission de Susiane. Note relative à la découverte sur le tombeau de Darius de sept inscriptions nouvelles. *Revue Archéologique*: troisième Série 6: 224–227.
- . 1890. *L'Acropole de Suse d'après les fouilles exécutées en 1884, 1885, 1886 sous les auspices du musée du Louvre*, Première partie histoire et géographie. Paris: Hachette.
- . 1893. *L'Acropole de Suse d'après les fouilles exécutées en 1884, 1885, 1886 sous les auspices du musée du Louvre*, ouvrage contenant 386 gravures insérées dans le texte. Paris: Hachette.
- . 1913. *Les Antiquités de Suse découvertes et rapportées par la mission Dieulafoy (1884–1886)*. Musée du Louvre. Paris: Ernest Leroux.
- Gasche, H. 1997. La période Roman Ghirshman (1946–1967). In: Chevalier, N. (ed.) *Une mission en Perse 1897–1912*. Paris: RMN, 168–179.
- Gasche, H., Steve, M.J. and Vallat, F. 2003. Suse. *Supplément au Dictionnaire de la Bible* 73–74: 360–652.
- Harper P.O., Aruz, J. and Tallon, F. (ed.) 1992. *The Royal City of Susa, New York, Metropolitan Museum of Art*, édition française par Caubet A. Paris: RMN, 1994.
- Jéquier, G. 1968. *Jéquier. En Perse. 1897–1902*. Journal et lettres de Gustave Jéquier, publiés et annotés par Michel Jéquier. Neuchâtel: Editions de la Baconnière.
- Lagrange, père M.-J. 1913. Les fouilles de Suse d'après les travaux de la Délégation en Perse. *Revue biblique* 126–150.
- Le Breton, L. 1957. The Early Periods at Susa, Mesopotamian Relations. *Iraq* 19: 79–124.
- Loftus, W.K. 1857. *Travels and Researches in Chaldaea and Susiana*. London: J. Nisbet and Co.
- Martinez-Sève, L-A. 1997. *Les figurines hellénisantes de Suse, contribution à l'histoire culturelle de Suse aux époques hellénistique et parthe*. PhD Diss., Université de Paris I: I.

- Mecquenem de, R. and Amiet, P. 1980. Les fouilleurs de Suse. *Iranica Antiqua* 15: 1–48.
- Ménant, J. 1874. *Annales des rois d'Assyrie, traduites et mises en ordre sur le texte assyrien*. Paris: Maisonneuve.
- Morgan de, J. 1895. *Mission scientifique en Perse. Cartes des rives méridionales de la mer Caspienne, du Kurdistan de Moukhri et de l'Elam*. Paris: E. Leroux.
- . 1896. *Mission scientifique en Perse. Recherches archéologiques*, IV, 1re partie. In: *Mission scientifique en Perse*, I–IV, 1894–1905. Paris: E. Leroux.
- . 1902a. *La Délégation en Perse du Ministère de l'Instruction Publique, 1897 à 1902*. Paris: E. Leroux.
- . 1902b. L'histoire de l'Elam d'après les matériaux fournis par les fouilles à Suse de 1897 à 1902. *Revue archéologique* 40: 140–171.
- . 1905. *Histoire et travaux de la Délégation en Perse du Ministère de l'Instruction Publique, 1897 à 1905*. Paris: E. Leroux.
- . 1997. *Mémoires de Jacques de Morgan. Souvenirs d'un archéologue*, Jaunay A. (ed.). Paris: L'Harmattan.
- Mousavi, A. 1996. Early Archaeological Adventures and Methodological Problems in Iranian Archaeology: The Evidence from Susa. *Iranica Antiqua* 31: 1–17.
- Nasiri-Moghaddam, N. 2004. *L'archéologie française en Perse et les antiquités nationales (1884–1914)*. Paris: Connaissances et savoirs.
- Oppert, J. 1876. Les inscriptions en langue susienne. Essai d'interprétation, *Mémoires du Congrès International des Orientalistes*. Compte-Rendu de la Première Session – Paris – 1873. Paris, 179–216.
- Parrot, A. 1946–1953 *Archéologie mésopotamienne*. I. Les étapes. II. Technique et problèmes. Paris.
- Perrot, G. and Chipiez, C. 1882–1914. *Histoire de l'art dans l'antiquité. Egypte, Assyrie, Phénicie, Judée, Asie Mineure, Perse, Grèce*. 10 vols. Paris: Hachette.
- Perrot, J. 1997. Les recherches de 1968 à 1979. In: Chevalier, N. (ed.) *Une mission en Perse 1897–1912*. Paris: RMN, 180–192.
- Pézard, M. and Pottier, E. 1913/1926. *Catalogue des Antiquités de Susiane au musée du Louvre (Mission J. de Morgan)*. Paris: Musées nationaux.
- Scheil, V. 1937. Les fouilles et l'histoire de la Babylonie, de l'Assyrie et de l'Elam, Conférence faite le 8 mars 1911 au Comité de l'Asie Française. In: *Au service de Clio*. Chalon-sur-Saône, 15–50.
- Spycket, A. 1997. Les collaborateurs de Jacques de Morgan. In: Chevalier, N. (ed.) *Une mission en Perse 1897–1912*. Paris: RMN, 126–131.
- Steve, M.-J., Gasche, H. and De Meyer, L. 1980. La Susiane au II^e millénaire: à propos d'une interprétation des fouilles de Suse. *Iranica Antiqua* 15: 49–154.
- Vanden Berghe, L. 1963. Les reliefs élamites de Mālāmir. *Iranica Antiqua* 10: 22–39.
- Will, E. 1981. Nécrologie: Roman Ghirshman (1895–1979). *Syria* 58: 212–214.

CHAPTER FOUR

Between orientalism and Persomania

The presentation of the Iranian collections at the Louvre



*Marianne Cotty**

Introduction

The Département des Antiquités Orientales of the Louvre was created in 1881 after the discoveries made on the Mesopotamian site of Tello. Detached from the main Department des Antiques, it gathered the non-classical antiquities of the Louvre, namely, the Musée Assyrien, that is to say, the collections brought from Khorsabad by the French consul P.-E. Botta and V. Place, the Antiquités Asiatiques, the Musée Judaïque and the Cypriot collections. Persia, for a long time at the margin of Western research due to the difficulty of traveling there, became from 1884 the preferred field for French scholars. Excavations at Susa were initiated by Marcel and Jane Dieulafoy, followed by members of the Délégation en Perse. The Louvre, the great beneficiary of the discoveries, enriched its collections by about 50,000 objects over the years, shipment by shipment. The museographic presentation changed several times between the late 19th and the end of the 2nd World War, considering the new discoveries and adapting to the diversity of the finds: from the extensive typology of utilitarian objects to the exceptional masterpieces, all would find their place in the museum galleries. These rearrangements and adjustments undertaken by curators and archaeologists were always guided by the will to promote the study and reveal the monuments of ancient Persia to all the publics. The various “educational” media, such as painting, photography, models and maps used to magnify and explain the collections constitute fundamental sources for the knowledge of the history of research and taste in 19th and early 20th century France.

The discoverers

Marcel and Jane Dieulafoy

The history of Susa extends over thousands of years, but its toponyms have not significantly varied until today. Thus, the first discoverers easily recognized Shush as the modern name of the city of the Persian kings mentioned in the great biblical historical books, in Genesis and in the works of classical authors. From the 19th century, Persia was visited by many travelers: Kinneir (1808–1810), Ker Porter (1817–1820) and Rawlinson (1836) paved the way (Chevalier 1997). Charles Texier also travelled the country in 1838, but it was the Flandin and Coste mission in 1839–1840 that would mark the real beginnings of the French explorations in Persia and constitute a turning point in Orientalism. Their publication of *Voyage en Perse*, six richly illustrated volumes, was a huge success and is still today an important source for the Persia of the 19th century (Flandin and Coste 1843–1851). Nevertheless, these French pioneers did not visit Susa. The first English explorers who travelled to Susa agreed that the Susa monuments held little interest. Layard asserted even in 1841: “I visited Susan, Rawlinson believes that this is the Shusan of the holy scriptures, as well as the grave of Daniel, but the ruins are insignificant (...) there is no indication of the presence of a great city” (Boré 1842: 334–335; in Chevalier 2010: 74). British William Kennett Loftus would demonstrate the contrary ten years later, followed by the Dieulafoys, the pioneers of the long tradition of French archaeologists at Susa (Curtis 1997).

In 1884, when Marcel Dieulafoy undertook excavations at Susa, almost no Persian site had been excavated. Thanks to the funding of 30,000 francs from the Direction des Musées Nationaux, they organized two campaigns (1884 to 1886). From the first campaign, the results were sensational; they discovered bricks belonging to the frieze of lions and frieze of archers and the two-headed capitals and elements of decoration from a ceremonial staircase. That year, 327 cases of architectural elements and bricks were shipped to France aboard the *Sané*. The bricks were reconstructed and restored in the workshops of the Louvre and Sèvres and would form the core of the Louvre’s Susian collections.

The main ambition of Marcel Dieulafoy was to demonstrate the Iranian origin of the vault. His theories on the links between Eastern and Western medieval art published in *L’Art antique de la Perse* (1885) and *L’Acropole de Suse* (1893) triggered more than one objection. Nevertheless, his ideas caused such a sensation in the scientific world that in 1895 he was elected to the Académie des Inscriptions et Belles-Lettres. France, wishing to continue its research in Persia and proud of its success in Susa, decided to create a Délégation Scientifique en Perse, and it was Jacques de Morgan, appointed Deputy Chief of the excavations in Persia in 1897, who would resume work at the end of that year.¹

The Délégation Scientifique en Perse

J. de Morgan, mining engineer and archaeologist extraordinaire, wanted to discover the history of Persia before the Persians. Indeed, the Dieulafoys had only touched the recent layers

and the Elamite levels were still unknown. Morgan devoted no less than 15 years to the Délégation en Perse (1897–1912) and made Susa the most important and the most perennial of European excavations in the Middle East. This indefatigable excavator contributed not only to the expansion of the collections of the Louvre but also those of the Museum d'Histoire Naturelle and of the Musée de Saint-Germain-en-Laye. His favoured area was the Acropole of Susa, where he dug trenches five meters wide to reach the earliest levels. He equipped himself with wagons of 300 litres and several kilometres of rails, and hired more than a thousand workers, which allowed him to significantly increase the monthly volume of exploitation. The excavation methods of Jacques de Morgan and his lack of knowledge of stratigraphy led to great confusion between the different excavated levels and the mixing of artifacts covering very broad periods (Morgan 1906).

From the first campaigns, all attention was on the discoveries of Mesopotamian monuments like the stele of Naram-Sin, the obelisk of Manishtushu (MDP I: 104, Figure 167 and MDP XIII: 72), the stele of the Code of Hammurabi (MDP VII: 28–29, Pl. V and MDP IV: 11–162), and finally, among these remarkable finds appeared the first evidence of the Elamite civilization!² The excavation of the *massif funéraire* provided the first prehistoric artifacts such as the Susa I ceramics and the first evidence of metallurgy. These painted vases were a complete novelty at the beginning of the 20th century, as nothing so old had been discovered in Mesopotamia.³

Morgan surrounded himself with many collaborators. Gustave Jéquier, an archaeologist and linguist Morgan had met in Egypt, and Georges Lampre, general secretary of the Délégation, would be the *chevilles ouvrières* of the mission. They would be joined in 1898 by father Vincent Scheil, a prominent Assyriologist, then by Roland de Mecquenem from 1903. The latter, a mining engineer like Morgan, became his main collaborator and perpetuated the “excavation methods” of his master. He would be officially responsible for the management of excavations in 1912. With Maurice Pillet, an architect and talented artist, he would continue the excavations of the Palace of Darius initiated by his predecessors.⁴

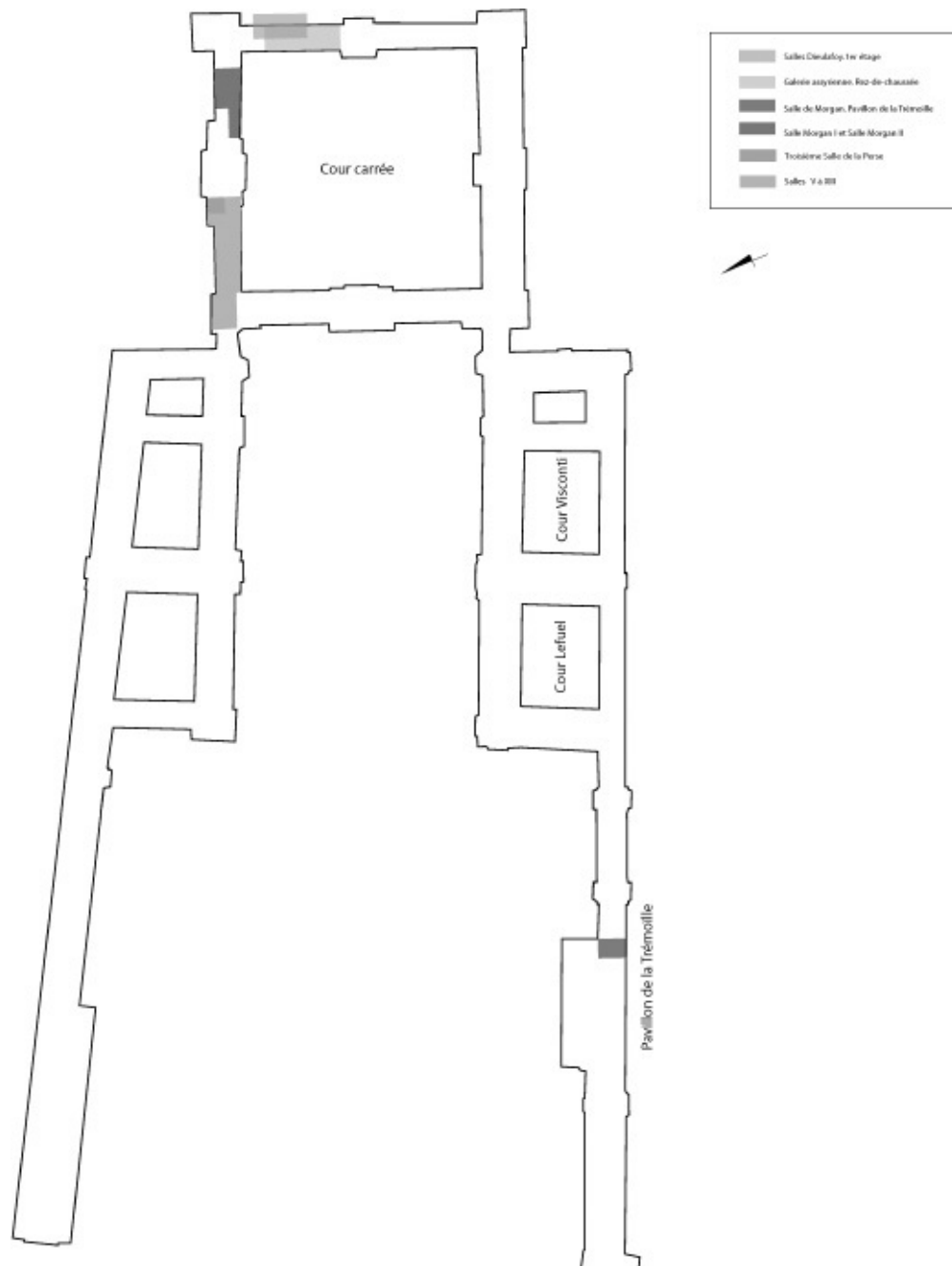
The museography

Through these campaigns, the Iranian collections of the Louvre were increased significantly. They provide, in parallel to those of Tello, the first large collections of objects to emerge from archaeological excavations, and their presentation therefore constituted a real challenge. The contents of the crates, which were inventoried in retrospect,⁵ were rarely known by the curators of the Louvre, and yet they were forced to quickly exhibit these works to the public!⁶ The museography, subject to the inevitable servitude of the architecture of the Louvre and of the administration, had to follow different “trends” in “the art of exhibition”. In the 19th and early 20th century, the Louvre Museum welcomed its visitors in rooms decorated with rich

wall paintings and abundant artefacts displayed one after the other, sometimes with little scientific consistency. This period was punctuated by many adjustments and rearrangements (see [Figure 4.1](#)).

The Dieulafoy rooms and the Exposition universelle

The Dieulafoy rooms were located in the north wing of the colonnade of Perrault on the first floor above the Assyrian halls ([Figure 4.1](#)). The *grande salle de Suse*, inaugurated in 1888, showed the remains brought by the Dieulafoys: the two bull protome capitals, the frieze of lions, two panels of archers, a decorative element of a ceremonial staircase and various antiquities: cylinders, glazed vessels, weapons, lamps, marble bowls, statues of bronze or agate, and cuneiform texts.⁷ The inauguration of this room is known from the engravings of Peulot after Cox, published in the *Univers Illustré* of 6 June 1888, and that of Tilly, which shows the capital framed by a frieze of archers ([Figure 4.2](#)). We see there the model of the Susa tell created by Dieulafoy taking pride of place at the centre of the room. Among the visitors, we see Ernest Renan in the foreground to the right, and Marcel Dieulafoy in the background indicating the capital to president Carnot. In the centre, Jane Dieulafoy and madame Carnot are leaning over a showcase.



[Figure 4.1 Schematic layout of the Iranian rooms at the Louvre Museum \(copyright Musée du Louvre, Département des Antiquités Orientales\).](#)

The *grande salle de Suse* ([Figures 4.3](#) and [4.4](#)) was furnished and decorated according to the plans of Edmond Guillaume and the decorative paintings executed by Charles Chauvin. The friezes and the ceiling of the *grande salle* are far from evoking Persian Achaemenid art but rather recall the Art Nouveau style (Aulanier 1964: 135). While some painted decorations of the Louvre evoked the works or the civilizations on display in the rooms, the paintings of Chauvin were mainly intended to immerse the visitor in a pleasant decorative environment (Bodenstein 2012: 182–183). The *petite salle de Suse*⁸ ([Figure 4.5](#)) located beyond the capital was decorated with a panorama of the region of Susa by Philippe-Marie-Emile Chapron and

Marcel Jambon, painters and decorators for theatre and opera. The rest of the room had been decorated by Charles Lameire, painter and decorator of religious buildings. Although incomplete, this room was nevertheless inaugurated in March 1891. It was designed to accommodate the rest of the objects of the mission of Susa, whose discoveries were increasing. One of the griffin reliefs and a large model of the Apadana made by Dieulafoy were also exhibited there (Dieulafoy 1893: 345, Pl. XIV). Testimony to the taste of the period for restoration of antique monuments, this model, which includes some mistakes, was nevertheless a very evocative restoration for the public (Tallon 1997: 55). The panorama of Chapron and Jambon representing the alluvial plain of Susa allowed the recreation of the atmosphere of the Dieulafoy excavations. On the other hand, the paintings of Lameire, like those of Chauvin, evoked nothing of Persia: they were inspired rather by Assyrian motifs. In the Sarzec room where the Sumerian objects were exhibited, Lameire also produced another Assyrian decoration directly inspired by the discoveries of Khorsabad and by the illustrations by Felix Thomas (Fontan 1994).



[Figure 4.2 Inauguration of the Dieulafoy collections. Engraving by Gusman after Guilliod \(*L'Univers illustré*, 6 June 1888\).](#)



[Figure 4.3 *Salle Dieulafoy* in about 1910 \(copyright Musée du Louvre, Département des Antiquités Orientales\).](#)



[Figure 4.4 *Salle Dieulafoy, grande salle de Suse* \(copyright Musée du Louvre, Département des Antiquités Orientales\).](#)



[Figure 4.5 *Salle Dieulafoy, petite salle de Suse* in about 1947 \(copyright Centre des Monuments Nationaux\).](#)

As shown by the engravings of 1888 (see [Figure 4.2](#)), the opening of the Dieulafoy rooms had an exceptional impact: “Everything was perfectly successful and two large rooms on the first floor of the Louvre were installed; the Achaemenid capital, frieze of lions, and frieze of archers were the ‘highlights’” (Mecquenem 1980: 3–4).⁹ During his visit to the Dieulafoy

rooms in 1900, M. Mozaffar ad-Din Shah raved about the enhancement of the glazed brick fragments that the governor of Dezful who came to Susa before the departure of the Dieulafoy mission had not found worthy of collection (Mecquenem 1980: 12).

The inauguration of the Dieulafoy rooms and these important discoveries constitute the foundational events of the reception of the Persian world in France. The opening of the rooms in 1888 was followed by the *Exposition Universelle* in the Champs-de-Mars in 1889, where a pavilion was dedicated to the “*Missions Archéologiques, ethnographiques, littéraires et scientifiques*.” A “*Salle de la Perse*” presented amongst others the casts by the Dieulafoy mission in Susa, photographs and the small model explaining the construction of the Apadana.¹⁰ After the end of the exhibition, this model and the table that supported it were donated to the Louvre Museum and exhibited in a recess of the Dieulafoy room (Figure 4.4, visible on the right).¹¹ Unfortunately, we have little information on the perception of this pavilion by the public. However, even if little is said in the press from this time, the glazed brick panels were a source of inspiration for the public and for artists. Indeed, from the presentation of the polychrome brick panels in the Louvre, the ceramist Emile Müller and sculptor Charles Louis Lesueur reproduced the frieze of lions and the archers in durable materials for presentation at the *Exposition Universelle*.¹² These artists also created a series of vessels in the shape of Achaemenid bricks.

Even if visitors to the Dieulafoy rooms and the *Exposition Universelle* were very numerous, it was mainly the wide dissemination of the images and stories of the Dieulafoys that introduced Achaemenid Persia to the scientific world and the general public. First published in the popular magazine *Le tour du Monde*, and considering the public’s enthusiasm, the narratives and photographs of Jane Dieulafoy would be collected in two large volumes *La Perse, la Chaldée et la Susiane* (Dieulafoy 1887a; 1887b). In 1888 she published her journal, where she records the excavations and life on the site (Dieulafoy 1888a; 1888b). The *Art antique de la Perse* (1885) and the *Acropole de Suse* (1893) by Marcel Dieulafoy are equally seminal works. They are richly illustrated with photographs taken by Jane Dieulafoy, who produced many picturesque views and panoramas but also used photography for scientific purposes as a “veritable archaeological recording tool”. At the end of the 19th century, photography, which contrary to drawing or painting constituted an irrefutable testimony, acquired the status of an auxiliary to archaeological work.¹³ For the first time in Persia, photography scientifically documented the results of the excavations, the site topography, the organization of field work and also architectural elements and artefacts discovered.

The Exhibition at the Grand Palais and the Pavillon de la Tremoille

The monuments brought to light by the Dieulafoys marked the French spirit and revealed Achaemenid Persian art, whose mysterious syncretism fascinated both the scholarly

community and the general public. But it was the discoveries of Morgan, seeking for the old Susa, which would announce the next resonance in the scientific research and anchor the posterity of Elam.

His first shipment of Susa antiquities to the Louvre in 1901 included items from the Elamite periods, previously unknown, and Mesopotamian monuments. It appears that these first discoveries were exhibited in the room of the sarcophagus of Eshmunazar and then the following year, in May 1902, in three rooms at the Grand Palais of the Champs Élysées.¹⁴ The stele of Naram-Sin, the obelisk of Manishtushu and the Code of Hammurabi resided together with ceramics from Susa I, the sacrificial bronze table, the jewellery from the Achaemenid burial, inscribed tablets and bricks and so on. This exhibition was very well received. Jacques de Morgan was pleased by the attendance: “[Y]esterday, the first public day, more than a thousand people arrived. I would never have believed that our demolition materials could achieve such success. I thought that only the learned would take interest. Some few people, it is true, were embittered but the vast majority were sincerely happy” (AMN, Morgan A4, Morgan to Héron de Villefosse; 1 May 1902).¹⁵ He was aware of the historical importance of the documents exhibited and was somewhat vexed when “a joker declared that we had only brought back bricks. The talk was not fair ... but had it been founded we would certainly not have complained, because these modest bricks are none other than “the pages of the history of Elam”” (Morgan 1905: 128).¹⁶ When the exhibition at the *Grand Palais* was over, the works were brought back to the Louvre. But their presentation at the heart of the museum necessitated a new premises, as there was no more space next to the Dieulafoy rooms (Aulanier 1964: 138).

Henceforth, the only rooms available were on the banks of the Seine. Thus in 1902, Gaston Redon, architect of the Louvre, prepared a room on the ground floor of the *Pavillon de la Trémoille* (Figure 4.1). The space was sufficiently large and satisfied Morgan, but problems with the location and funding complicated the rearrangement desired by the excavator. Indeed, he himself had to provide the funds for these works from the budget of the delegation. He was reimbursed only three years later after lengthy negotiations with the Louvre. Another event came to irritate the excavator when in June 1904, after returning from the mission, he realized that a third of the room had been taken up by a mastaba and other Egyptian artifacts. In his correspondence with Leon Heuzey, director of Antiquités orientales, he complained about only being able to install 11 showcases instead of the 21 that had been granted to him for the *Grand Palais* in 1902: “The room will be absolutely crowded with socles and flat, table showcases, the public will have great difficulty circulating” (AMN, Morgan A4, Morgan to Heuzey, 7 December 1904).¹⁷ But against all odds, two years later, still addressing Heuzey, he admits that it is not so inconvenient to mix these items because “the Egyptians come from Chaldea ... and for the jewellery, the public who only rarely read the labels will believe that they come from Telloh; who cares! So long as it honours our museum?” (AMN, Morgan A4,

Morgan to Heuzey, 20 June 1906).¹⁸

Because of all these setbacks, the official inaugurations of this *Salle de Morgan*, also called *Nouvelle Salle de la Susiane*, did not take place until 1908 (the 3rd of July and 6 September). However, this presentation was very successful because “the large panels with inscriptions and plaster castings made after rubbings, and the paintings by G. Bondoux mitigated the severity of the inscribed bricks and the heavy Elamite sculptures; the most remarkable pieces were the stele of Naramsin and the Code of Hammurabi” (Mecquenem 1980: 18).¹⁹ The press, meanwhile, was passionate about Elamite objects: “In the midst of coarse alabaster statues, decorative reliefs pierced at the centre like an opening for suspension. In one, one sees two coiled serpents biting their tail, primitive form of the caduceus (?) – the most interesting discovery consists of two large painted urns that were filled with disparate objects, alabaster vases, bronze tools such as axes, saws, points and even a strainer, and cylinder-seals”.²⁰

Morgan was driven by a pedagogical desire and wanted to explain to the visitor how the excavations in the Near East took place. For the first time, the Iranian rooms were decorated with a “map of the Chaldean-Persian countries” realised by Jambon and Bondoux and a dozen paintings by the latter painter attached to the mission. Only two large arched canvases, *Le tell de Suse avant les fouilles* and *Suse pendant les fouilles*, which fit in with the architecture of the room, were hung permanently.²¹ These two large-scale, oil-on-canvas works were made in Paris in 1905. A dozen studies after nature, painted during his stays at Susa in 1902 and 1903, occupied the interior window embrasures.²² *Le tell de Suse avant les fouilles* presents a wild and romantic view of Susa, while *Suse pendant les fouilles* resurrects life on the site by staging the workers in the heart of the trenches. Thus, Morgan brought the archaeological methods and techniques into the Louvre. The excavator wanted to restore the atmosphere of Susa so that the visitor could be transported to the centre of the landscape “because we had to give the visitor a vision of the country where the events had occurred ... no description can replace what the eyes capture in an instant ...” (Morgan 1909: 104–105).²³ Even if Morgan largely used photography to document the excavation and illustrate publications,²⁴ he observed that it did not bring any notion of the transparency of the air, the colour of the sites or the light that has so much influence on the human spirit. It is because of this that he appealed to Bondoux, who “possessed in his brush the light of the Orient” (Morgan 1905: 107).²⁵ Unfortunately, the Comité Consultatif and the Conseil des Musées opposed the exhibition of the painted landscapes in the Susa gallery, and will remove the canvases and panels in 1906,²⁶ against the advice of Morgan.²⁷

New distributions to the Verne plan

Soon after the inauguration of the *Salle de Morgan* at the *Pavillon de la Trémoille*, the Louvre

received a new shipment of antiquities (Morgan 1909). While the wish was to declutter the galleries to give more space to the objects, their number increased constantly. It was for this reason that Eugène Ledrain, curator of the Antiquités Orientales, decided to transfer the large-scale monuments of Susa, those most likely to attract the general public, into the Assyrian gallery (Figure 4.1) renamed for the occasion *Salle de la Susiane, Mission Jacques de Morgan* (Figure 4.6). Despite this new room bearing his name, Morgan was in no way satisfied with this new arrangement and deplored that “the Elamite would disappear amongst the Assyrian, Chaldean or even the Achaemenid” and that this melange “blurs the vision of the Elamite world” (Morgan 1905: 115).²⁸ The antiquities of Susiana found themselves separated in two distant spaces of the museum²⁹ and Morgan again deplored “this fragmentation of the Susa collection (...) is truly unfortunate, because the great value of the series is nearly annihilated” (Jaunay 1997: 500).³⁰ In a letter to Léon Heuzey, he regrets that “the public will not be able to judge the whole [collections] but ... we do not do what we want” (AMN, Morgan A4, Morgan to Heuzey; 13 June 1908).³¹ Henceforward, the room of the *Pavillon de la Trémoille* displayed some small objects and ceramics. The showcases of the Dieulafoy rooms also continued to be filled.



[Figure 4.6 *Salle de la Susiane. Mission J. de Morgan* in the Assyrian gallery \(1909\) \(copyright Musée du Louvre, Département des Antiquités Orientales\).](#)

On the eve of the 1st World War, the département des Antiquités orientales therefore found itself cramped in rooms still decorated with outdated paintings. During the conflict, all

activities were interrupted at the Louvre, but publications continued: “[T]here have been some new rooms and several new catalogues in press; the one on Assyrian Antiquities by Mr Pottier has been published”.³² In 1913, Maurice Pézard and Edmond Pottier published *Musée du Louvre. Les Antiquités de la Susiane. (Mission J. de Morgan)*. The catalogue was scholarly and for the wider public, like a visitor guide, and was soon expanded and reissued in 1926. This seminal work, which followed the 1913 Dieulafoys catalogue, emphasised the origin of the Elamites and contributed to the diffusion of knowledge of the Elamite world at the beginning of the 20th century.

Upon reopening after the 1st World War, the département des Antiquités orientales still occupied ten rooms,³³ just like in 1892! Nevertheless, in 1925 Henry Verne was appointed director of the Louvre and initiated a complete reorganization. He wanted each department within the museum to form a coherent whole (Verne 1934). The Verne plan assigned the département des antiquités Orientales to the ground floor of the *Cour Carrée*, 20 adjoining rooms, and some of the rooms occupied by the Ministry of Finance ([Figure 4.1](#)). The proposal was excellent but would only be achieved partially, step by step. In 1930, prior to the general rearrangement, the department organized an exhibition at the Musée de l’Orangerie: *Fouilles de Tello, de Suse et de Syrie* ([Figure 4.7](#)).³⁴ At that time, the Orangerie provided a temporary exhibition space, not far from the Louvre’s palace.³⁵ The great institutional excavations of the Louvre and the more recent ones in Syria were presented in a modern museography with an educational use of photography.

At the time of the great rearrangement in 1932–1933, the monuments of the Morgan mission remained in the Assyrian gallery, and the Dieulafoy rooms were filled with Levantine and Mesopotamian antiquities. In 1932, the *Salle de Morgan* in the *Pavillon de la Trémoille* closed definitively, and the works were transferred to two new rooms of the *Cour Carrée*: *Salle Morgan I*, and *Salle Morgan II* ([Figures 4.1](#) and [4.8](#)). This presentation, which lasted until 1936 (Lorendeau and Dewisme 2011: 45), made it possible to “improve temporarily and properly the order and presentation of the collections” (Verne 1934: 12). Nearby, a “third Persian room” presented the capital of the Apadana and ceramics displayed according to Edmond Pottier’s typology. The rooms were refreshed and the painted decorations were removed, revealing a more sober mineral colour. In the interwar political and social context, the museum wished to expand its audience to all segments of the population, and therefore a real museographic reflection was undertaken. Thus, the presentation favoured major works rather than long typological series of objects.³⁶ Many works now found themselves returned to storage and the sleeker rooms permitted a more coherent geographical and chronological regrouping.



[Figure 4.7](#) Rooms 3 and 4 in the exhibition *Fouilles de Tello, de Suse et de Syrie* in the Musée de l'Orangerie (1930) (copyright Musée du Louvre, Département des Antiquités Orientales).



[Figure 4.8](#) *Salle Morgan II* in about 1950 (copyright Musée du Louvre, Département des Antiquités Orientales).

On the eve of the 2nd World War, the new rooms of Antiquités Orientales were inaugurated,^{[37](#)} but the work was far from being completed when in September 1939 the museum was completely evacuated with the exception of the Assyrian reliefs. Three hundred cases were stored at Chambord and Cheverny and would be brought back to Paris in late 1945, where they were slowly unpacked. Thanks to André Parrot, director of the *Antiquités*

Orientales, the refurbishment of the rooms of the *Cour Carrée* proposed by the Verne plan was completed. In 1947, the department was inaugurated on the occasion of the centenary of the Assyrian department; the collections were finally grouped by regions and sites, beyond the boundaries of the missions. The large geographical and chronological itinerary established for these rooms is still in use: Mesopotamia, Iran, and the Levant. Of the 22 rooms of the department, eight were occupied by Iranian collections. Finally, the recent excavations of the Louvre at Tepe Giyan and Tepe Sialk came to complete the Susian collection and were exhibited in Rooms V to XIII ([Figure 4.1](#)) (Parrot 1947). In the 1950s, the representation of Elam, hitherto seen through the Susian prism, evolved again thanks to excavations at Choga Zanbil conducted by Roman Ghirshman. Knowledge was considerably fleshed out, and the results forced the re-evaluation of certain theories and classifications.

Conclusion

The Louvre, despite its universal humanist vocation, had great difficulty in building the museographic discourse of Iranian collections. The evolution of the presentation over a half-century demonstrates a close link between the excavation results and the history of the collections. The abundance of items brought from Susa was exciting, and their careful inventorying took a long time. The Achaemenid remains, the first to be brought to France, were immediately successful. By contrast, the Elamite civilization, discovered and immediately exhibited, did not have time to win over the public. Moreover, it was not easy to make Elamite civilization comprehensible to the visitor, as its remains were distributed through very distant rooms, and all periods were mixed in a single room or in a single showcase. The general public would therefore focus especially on the Achaemenid or Mesopotamian monuments, Elam appearing as a “brilliant second, more or less marginal, in this prestigious collection” (Amiet 1988: 10). The lack of permanent place and the inertia of the Louvre palace were sometimes solved by organizing exhibitions outside the Louvre, allowing more museographic freedom for the excavators and the curators. The books, paintings and photographs revealed the site, its atmosphere and its excavators, enabling both the education of the public and the expression of the nature of the lives of its explorers.

Abbreviations

AMN	Archives des Musées Nationaux.
MDP	Mémoires de la Délégation en Perse.

Notes

* Translated from French by Javier Álvarez-Mon and Yasmina Wicks.

- 1 In 1895 the agreement between Naser ad-Din Shah and France was negotiated and signed, and France obtained an excavation monopoly over all of Persia. This agreement was replaced in 1900 by a new treaty signed by Mozaffar ad-Din Shah and the French minister of foreign affairs (see N. Chevalier, Chapter 3 in this volume).
- 2 For example: the statue of Napir-Asu, Sit Shamsi bronze model, the statue of Narundi, the bas-relief depicting the dragon-serpent, the great sacrificial bronze table, the stele of Untash-Napirisha, the bas-relief of the lady spinning, the bronze relief with warriors, and many terracottas and written documents were included in the first shipments.
- 3 Regarding one of the shipments, Morgan speaks of “a thousand painted vases which form an incomparable collection” (AMN, Morgan A4, 6 July 1908). The first publication of ceramics: MDP I, Pl. 17–18 and MDP XIII.
- 4 His watercolour depicting the palace of Darius won him the gold medal at the 1914 *Salon des Artistes Français*.
- 5 The list of discoveries of Morgan and annual inventories of Mecquenem were laconic and imprecise. The inventory of excavations created at the museum using the register AS (*Antiquités de la Susiane*) was meant to match the annual registers, but there are gaps and duplicate entries. The current inventory Sb (*Suse bis*) was created in 1933 by G. Contenau, curator of the department, to replace all previous inventories from Susa, considering the disorder and complication that had surrounded their composition. It covers in part the AOD inventories (Dieulafoy).
- 6 Léon Heuzey, director of the antiquités Orientales, wrote many letters to Morgan asking for the discovery records (AMN, Morgan, A4).
- 7 In fact, the Dieulafoy rooms were opened in 1886 but had to close because the bricks were deteriorating. They were treated with spermaceti and then re-baked.
- 8 In 1892 the director of the Louvre decided to place historical labels in the rooms for the sake of comprehension.
- 9 “ Le tout fut parfaitement réussi et deux grandes salles du premier étage du Louvre furent installées; le chapiteau achéménide, la frise des lions, les frises d'archers en furent les “clous” ”.
- 10 We do not know exactly which photographs were exhibited: “Braun is willing to print the photographs brought by Dieulafoy. It would be very interesting to create an album of those photos for the exhibit of the Missions”; “ Braun est disposé à tirer les photographies rapporté par Dieulafoy. Il serait très intéressant de constituer en vue de l'exposition des Missions, un album de ces photos. ” (AMN Z II-XX 1889).
- 11 “ (...) don au Musée du Louvre des plans de fouilles de Tello [et] du modèle de l'Apadana de Darius, qui était exposé au Champs de Mars ”; “ (...) gift of the plans of Tello excavations [and] the model of the Apadana of Darius which was exhibited in the Champs de Mars donated to the Louvre Museum” (AMN, A8–1889–1890. A. Kaempfen to A. Fallières; December 12, 1889).
- 12 They received a prize for these reproductions: they are still visible in Paris at 11 Rue des Sablons and on the facade of the residence of Lesueur in Vitry-sur-Seine (26 Rue Camille Groult, *Maison aux Lions*).
- 13 The engravings illustrating the publications of Dieulafoy carried the testimonial: “Engraving after a photograph of ...” (*Gravure réalisée d'après une photographie de. . .*).
- 14 The volume which accompanied the exhibit (Morgan 1902) summarises the works of the delegation but without the object catalogue of the exhibition. These would be enumerated in the second edition (Morgan 1905).

- [15](#) “ Hier premier jour public, il est venu plus de mille personnes je n’aurais jamais cru que nos matériaux de démolition puissent obtenir un tel succès. Je croyais que seuls les savants y prendraient intérêt. Quelques-uns il est vrai, peu nombreux boivent du vinaigre mais la grande majorité était sincèrement contente ”.
- [16](#) “ Un plaisant déclarait que nous n’avions rapporté que des briques. Le propos n’était pas juste, [...] mais n’eût-il été fondé, que certes nous n’aurions pas eu à nous plaindre, car ces modestes briques ne sont autres que “les pages de l’Histoire de Elam.”
- [17](#) “ La salle sera absolument encombrée de socles et de vitrine plates, le public aura grand peine à y circuler. ”
- [18](#) “ Les égyptiens viennent de Chaldée [...] quant aux bijoux, le public qui ne lit que rarement les étiquettes, croira qu’ils viennent de Telloh, qu’importe ! Pourvu qu’il fasse honneur à notre musée? ”
- [19](#) “ “Les grands panneaux d’inscriptions et de sculptures moulés en plâtre d’après les estampages, les tableaux de G. Bondoux atténuaient la sévérité des briques inscrites et des lourdes sculptures élamites; les pièces les plus remarquables étaient la stèle de Naramsin et le Code de Hammourabi. ”
- [20](#) “ Les fouilles de Suse ” (*L’éclair*, July 1908) referred to a bituminous relief (Sb 2724) and the *vase à la cachette* (Sb 2723).
- [21](#) Oil on canvas H. 4.60 m. Musée du Louvre, Département de Peintures, 20802 (Harper et al. 1992: 3). Oil on canvas H. 6.63 m. Musée du Louvre, Département de Peintures, 20803 (Harper et al. 1992: 17).
- [22](#) Now in the Musée du Louvre, Département de Peintures.
- [23](#) “ Car il fallait procurer au visiteur la vision du pays où les événements s’étaient déroulés [...] aucune description ne peut remplacer ce que les yeux embrassent d’un seul coup [...] ”.
- [24](#) About four thousand phototypes of the *Mission en Perse* are kept in the *département des Antiquités orientales* of the Louvre: mainly panoramas and landscapes, but also of objects and views of the site.
- [25](#) “ Possédait dans son pinceau la lumière de l’Orient. ”
- [26](#) “I decided with Mr. Bondoux to remove the paintings and panels that were yellowing the window embrasures. Mr. Bondoux gave me a receipt for six hundred paintings, studies painted during his mission with Mr. Morgan, twelve large panels for hanging up the paintings and 11 watercolors of Mr. Émile André belonging to Mr Morgan. The Museum keeps 19 paintings that I have deposited provisionally on the landing that follows the Morgan room”; “ J’ai décidé avec M. Bondoux à l’enlèvement des toiles et des panneaux qui jaunissaient les embrasures de fenêtres. M. Bondoux m’a remis un reçu signé de six cent toiles, études peintes au cours de sa mission avec M. de Morgan, douze grands panneaux pour accrocher les toiles, et onze aquarelles de M. Émile André qui appartiennent à Mr de Morgan. Le Musée garde dix-neuf toiles que j’ai déposées provisoirement sur le palier qui suit la salle de Morgan ”. (AMN, Morgan A4, Pottier to Morgan; 19 July 1906).
- [27](#) “The public was [...] satisfied to know Persia other than through blocks of diorite [...] It is not sacrilegious to keep the paintings in the galleries dedicated to archaeology”; “ Le public a [...] été satisfait de connaître la Perse autrement qu’à travers des blocs de diorite [...] Il n’est pas sacrilège de conserver de la peinture dans les salles archéologiques. ” (AMN, Morgan A4, Morgan to Homolle; 20 June 1906).
- [28](#) “ L’élamite dispara[isse] au milieu de l’assyrien, du chaldéen, voire même de l’achéménide ” and this melange “ brouille la vision du monde élamite. ”
- [29](#) Six hundred metres separate the room of the *Pavillon de la Tremoille* from the other collections around the Cour Carrée.
- [30](#) “ Cet émiettement des collection de Suse (...) tout à fait déplorable, car la grande valeur de ses séries est pour ainsi dire

annihilée. ”

- [31](#) “ Le public ne puisse pas juger de l'ensemble [des collections] mais [...] on ne fait pas ce qu'on veut. ”
- [32](#) M. Koechlin in *L'annuaire de la société des amis du Louvre*, 1919. “ Il y a eu quelques nouvelles salles et plusieurs catalogues nouveaux sous presse celui des antiquités assyriennes de M. Pottier a pu paraître. ”
- [33](#) Six rooms on the ground floor, three on the first floor of the colonnade and one in the *Pavillon de la Tremoille*.
- [34](#) The exhibition catalogue was entitled: *Catalogue de l'exposition d'antiquités orientales: fouilles de Tello, de Suse et de Syrie: octobre -novembre 1930. Paris. Musée de l'Orangerie des Tuileries*. Paris: Musées Nationaux.
- [35](#) At the time, the *Musée de l'Orangerie de Tuileries* was attached to the Musée du Louvre.
- [36](#) The first true department guide (Rutten 1934) was also published.
- [37](#) In 1938 the rooms of the Department des Antiquités Orientales was inaugurated with electric lighting to allow longer opening hours during winter.

Bibliography

- Amiet, P. 1988. *Suse, 6000 ans d'histoire*. Paris: Monographies des Musées de France, Musée du Louvre.
- Aulanier, C. 1964. *Histoire du Palais et du Musée du Louvre. Le Pavillon de l'Horloge et le département des antiquités orientales*. Paris: Éditions des Musées nationaux.
- Bodenstein, F. 2012. Framing the Artifact. Murals for the Display of Antiquity in the Louvre. *Museum History Journal* 5/2: 167–186.
- Boré, E. 1842. Lettres sur quelques antiquités de la Perse. *Journal Asiatique*, troisième série 13: 327–335.
- Chevalier, N. 1997. La découverte de la Perse antique par les voyageurs français au début du XIX^e siècle. In: Chevalier, N. (ed.) *Une Mission en Perse: 1897–1912*, Les Dossiers du musée du Louvre. Paris: Réunion des musées nationaux, 24–35.
- . 2010. Les découvreurs du palais de Suse. In: Perrot, J. (ed.) *Le palais de Darius à Suse: Une résidence royale sur la route de Persépolis à Babylone*. Paris: PUPS, 74–115.
- Curtis, J. 1997. Les fouilles de W.K. Loftus à Suse. In: Chevalier, N. (ed.) *Une Mission en Perse: 1897–1912*, Les Dossiers du musée du Louvre. Paris: Réunion des musées nationaux, 36–45.
- Dieulafoy, J. 1887a. *La Perse, la Chaldée et la Susiane*. Paris: Hachette et Cie.
- . 1887b. À Suse (1884–1886). *Journal des fouilles. Le Tour du Monde. Nouveau journal des voyages* 54 (1887/2): 1–96.
- . 1888a. *A Suse, journal des fouilles, 1884–1885*. Paris: Hachette.
- . 1888b. À Suse (1884–1886). *Journal des fouilles. Le Tour du Monde. Nouveau journal des voyages* 55 (1888/1): 1–80.
- Dieulafoy, M. 1885. *L'art antique de la Perse: Achéménides, Parthes, Sassanides*. Paris: Librairie centrale d'architecture.
- . 1893. *L'acropole de Suse, d'après les fouilles exécutées en 1884, 1885, 1886, sous les auspices du Musée du Louvre*. Paris: Hachette et Cie.
- . 1913. *Les Antiquités de Suse découvertes et rapportées par la mission Dieulafoy (1884–1886)*. Paris: E. Leroux.
- Flandin, E.N. and Coste, P.X. 1843–1851. *Voyage en Perse de MM. Eugène Flandin, peintre, et Pascal Coste, architecte, attachés à l'ambassade de France en Perse pendant les années 1840 et 1841*. Paris: Gide et Jules Baudry.
- Fontan, E. 1994. Le décor assyrien de la Salle Sarzec au Louvre. In: Fontan, E. and Chevalier, N. (eds.) *De Khorsabad à Paris: la*

- découverte des Assyriens*. Paris: Réunion des musées nationaux, 242–247.
- Harper, P.O., Aruz, J. and Tallon, F. (eds.) 1992. *The Royal City of Susa. Ancient Near Eastern Treasures in the Louvre*. New York: The Metropolitan Museum of Art.
- Jaunay, A. 1997. *Mémoires de Jacques de Morgan 1857–1924*. Paris: L'Harmattan.
- Koechlin, M.R. 1911. Notice read by M.R. Koechlin. *Société des amis du Louvre*, Paris.
- Lorendeau, J. and Dewisme, V. 2011. *Guide Historique des salles du musée du Louvre, Septembre 2011* (non publié).
- Mecquenem, R. de 1980. Les fouilleurs de Suse. *Iranica Antiqua* 15: 1–47.
- Morgan, J. de 1902. *La Délégation en Perse du Ministère de l'Instruction publique, 1897–1902*. Paris: E. Leroux.
- . 1905. *Histoire et travaux de la Délégation en Perse. 1897–1902*. Paris: E. Leroux.
- . 1906. *Recherches archéologiques. Leur but et leurs procédés*. Paris: Éditions de la “Revue des Idées”.
- . 1909. *De Suse au Louvre: aventures d'un convoi d'antiquités entre Suse et la mer*. Paris: E. Leroux.
- Parrot, A. 1947. *Musée du Louvre: Le département des Antiquités orientales: Guide sommaire*. Paris: Réunion des Musées nationaux.
- Pézar, M. and Pottier, E. 1913. *Musée du Louvre. Les Antiquités de la Susiane (Mission J. De Morgan)*. Paris: E. Leroux.
- . 1926. *Catalogue des Antiquités de la Susiane (Mission J. De Morgan). Musée National du Louvre*. Paris: Musées nationaux.
- Rutten, M. 1934. *Musée du Louvre: Antiquités orientales: guide*. Paris: Musées nationaux.
- Tallon, F. 1997. Les fouilles de Marcel Dieulafoy à Suse. La résurrection du palais de Darius. In: Chevalier, N. (ed.) *Une Mission en Perse: 1897–1912*, Les Dossiers du musée du Louvre. Paris: Réunion des Musées nationaux, 46–55.
- Verne, H. 1934. Le Plan d'extension des regroupements méthodiques des collections des musées du Louvre. Les travaux de 1927–1934. *Bulletin des Musées de France* 1: 1–38.

CHAPTER FIVE

Elamite forgeries and the antiquities market



Oscar White Muscarella

Introduction

My main interests in Iranian art and archaeology, excavation and research, relate to the Late Bronze and Iron Age, and thereby I became involved with Elamite archaeology and artifacts. I and many others learned a great deal from the superb volume on excavated Elamite artifacts from all periods from *The Royal City of Susa* (eds. P. O. Harper et al., Metropolitan Museum of Art 1992), which is required reading for all Elamite studies. Inasmuch as forgers have made copies of the artifacts of nearly every ancient culture, I was naturally led to investigating the existence of Elamite forgeries when I began researching forgeries of ancient Near Eastern artifacts in general. My work resulted in several articles and a book (Muscarella 2000a).

Forgeries exist throughout the whole corpus of alleged ancient antiquities, indeed in all disciplines where collecting occurs, and have existed for many decades. Forgeries are manufactured to be sold alongside genuine unexcavated, plundered antiquities. They are manufactured in workshops all over modern Near Eastern countries (as seen in Figure 5.1a; I obtained this photo of a workshop in Iran decades ago from a Museum curator, but have no memory of how he got it). Their production and sales escalated in the mid-20th century due to increasing demands of museums and collectors for prestigious “antiquities” to collect and publish. They are offered for sale by self-labeled antiquities dealers and auction houses, all self-proclaimed experts, albeit most sell forgeries worldwide (collectors exist in many countries), as if they had been plundered (albeit that word is never used) and accordingly are purchased as such. Forgeries of ancient Near Eastern antiquities are innumerable; I gave up attempting to count them. But, so far as I have been able to determine, there are not many examples of Elamite forgeries that I have recognized (see Muscarella 2000a: 130–132).

The method for detecting forgeries is complex, but simple to describe. One must thoroughly know the local styles and manufacture techniques of the cultures one studies, viz. did they cast or hammer an object, make artifacts from one or more pieces of metal, and most important, what was the nature of the designs and styles of particular cultures (Muscarella 2000a: 18–20,

2000b, 2008, 2010)? There are no shortcuts.



[Figure 5.1 \[a\] Photograph of an Iranian forger's shop \(Muscarella\); \[b\] Helmet in the Metropolitan Museum of Art purchased in 1963 \(63.74\).](#)

The language of the antiquities market

Archaeologists designate excavated material as *artifacts*, and those non-excavated as *antiquities*. Possessors of antiquities often claim they had been “excavated”, but this term can be used only to designate an archaeological activity. Disorder, pertinent to both legal and archaeological matters, occurs when museums and antiquity dealers, and some archaeologists, refer to “provenance” to identify a site-source of an unexcavated antiquity. But the terms provenance and provenience are distinct, inasmuch as they designate two distinct loci and two

different activities. *Provenience* specifically designates the site where an artifact was excavated; *provenance* identifies the current or past location of the antiquity: a collector, museum, auction house or dealer's shop (Muscarella 1977a; and *pace* Brodie et al. 2000: 3).

Collector and museum catalogues and exhibition labels, along with auction house and dealer catalogues, sometimes furnish a deceptive claim that the antiquity derived from a named site, but they neglect to name the attribution informant: a dealer or a previous auction house sale (Muscarella 1977c: 77–79; 2000a: 11, 14; Vitelli 1984: 153). A fairly small number of antiquities were indeed plundered and traded decades ago, sometimes legally (e.g., “commercial excavations” in Iran). But these activities have never ceased; they continue relentlessly throughout the world.

Plunderers, antiquity dealers, museums and forgeries

The objective of plunder is the acquisition of treasure to be sold: no customers, no plunder. Universally, it is conducted by gangs of looters (often known by the Italian term *tombaroli*) who work as organized teams. Often they commit violence to defend their sites (Brodie et al. 2000: 15–17; Daily Telegraph, October 3, 2004). Dealers and their customers disingenuously allege that their antiquities were merely “found in the ground”, that “it was a poor farmer plowing his field” who accidentally made a “chance find” (Atwood 2004: 288 n. 32). Or, in J. Cuno's classic museum-speak/ classical critical theory-speak (to let readers know he has browsed Adorno): “It's out of the ground. It's out of the country. It's on the market” – the ground being a “nationalist's” buried cemetery, a tomb, or a mound (Bator 1982: 303–306; Elia 1997: 92; Mackenzie 2005: 55–60, 213–216, 229; Muscarella 2007: 612).

Antiquity dealers are the penultimate destination for plunder. They bear sophisticated names such as Ariadne Galleries, Royal-Athena Galleries, Phoenix Ancient Art or simply the dealer's name. They save and sell “art” “acquired through trade” and “in good faith,” implying legitimate acquisition (Muscarella 1977b: 159–160; 2000a: 2; Koczka 1989: 190–191; Atwood 2004: 31). The final markets for dealers' antiquities are collectors and museums (Muscarella 2007: 611–614; 2009a: 404–405). Auction houses are also major vendors of antiquities, many of which have been recently plundered (Brodie et al. 2000: 23, 26–29). To disguise these antiquities, dealers and auction houses provide a camouflage ruse, proffering a deceptive provenance by claiming that their antiquity derived from “an old private collection” recently discovered in a basement in Italy or Germany, or derived from a “noble European family” or from the “Collection of Monsieur R” (Atwood 2004; Simpson 2005: 29–30, 32; Muscarella 2007: 610; Christie's, London, 10/25/07: 83). To document a purportedly old provenance, dealers will supply forged letters, eagerly embraced by their customers, as documentation that the purchase was legitimate (Atwood 2004: 84). They also often cite an earlier auction sale as a provenance for their antiquity, which is merely a record of yet another modern provenance.

Dealers also utilize auctions to sell their merchandise anonymously, especially when they suspect it is a forgery. Another antiquity-selling market is the Internet – websites like eBay – where, alongside genuine artifacts, forgeries are offered for sale (Stanish 2008). Such behavior is classic “bazaar archaeology” (Muscarella 1995; 2003: 264–265; 2006: 151–152, 157, 161–165).

It is evident that museums worldwide have been and remain the foremost purchasers of plundered antiquities (Koczka 1989: 192–193; Muscarella 2000a: 23–25; 2007: 611–612). Curators, some of whom are archaeologists, initiate their museum acquisitions, seeking out and proposing purchases (Muscarella 2007: 612–613; 2009a: 400–401; Cook 1995: 181, 185; Graepler 2004), but ultimately directors and trustees make the final purchase decisions. Unknown to most scholars and the public is that they make purchases (and accept donations) knowing that they were plundered and smuggled abroad, an activity rarely reported in the press (for rare examples, see E. Wyatt, *The New York Times*, 1/26/08: 1, 13; 1/30/08). Trustees include not only wealthy and powerful citizens but also national and local government officials and owners of important newspapers, all functioning in conflict-of-interest roles (Silver 2006: 3; Muscarella 2009a: 399; 2009b: 7, 11–12). Some trustees collect antiquities, in part for eventual tax-deductible donations to their museums (Nagin 1986: 24; Renfrew 2000: 27–35; Atwood 2004: 141–142; Silver 2006: 1; Wald 2008). Private collectors are also wealthy individuals of social importance, exemplifying these roles by their purchases. These are exhibited in, or donated to, museums, for which they have galleries named after them, and receive tax-deduction benefits based on the alleged increase in value since the original purchase (Brodie and Renfrew 2005: 353–356; Silver 2006: 1, 7–8; Greenfield 2007: 259). And noteworthy is the fact that it is self-serving antiquities dealers who furnish the museum appraisals. Collectors are cited by dealers and museum personnel as “prominent” or “serious” (read “serial”) collectors, as having a “lust” or passion for art, thus revealing their infatuation (Muscarella 2000a: 9, 11–13, 23 n. 5). Consequently, pivotal to comprehending the nature of the plunder culture is full awareness that, worldwide, museums and private collectors are the *financers and sponsors*, the *beginning* of the long chain of the process (Brodie and Renfrew: 2005: 349).

The detection of forgeries takes years of studying excavated artifacts, their specific styles and motifs, as well as the structuring technologies and materials employed by individual cultures, that is, to employ connoisseurship (a word now condemned by some). Connoisseurship, like all heuristic investigations, is fallible but is absolutely essential for the study of artifacts and antiquities, with the caveat that, aside from scholarly mistakes and ignorance, it has its manipulators (Muscarella 1977b: 165–169 n. 68; 1980: 118–119; Löw 1993: 39–41; Simpson 2005: 28–34; Grann 2010). While archaeologists are becoming capable of recognizing forgeries, some (most?) who are anthropologically trained are not. Brazenly rejecting these skills, they assert, “Archaeology is anthropology or it is nothing”, and they scorn traditional archaeologists as “object oriented self-serving ... antiquarians” (Muscarella

2000a: 10–11). Accordingly, those who proclaim this off-the-wall dogma theory ignore stylistic evaluations of artifacts they encounter (except pottery), and lack both knowledge and interest in evaluating forgeries. Some forgeries exhibit good workmanship and artistic skills (e.g., Waxman 2008: 153–162), others reveal unskilled hands, incorporating stylistic errors or anachronistic details (Löw 1993; Lawergren 2000; Muscarella 2000a: 31–215). Forgers often unwittingly produce stylistic or physical discrepancies – for example, eye structure – or misinterpret ancient manufacturing techniques (Löw 1993: 38; Muscarella 2000a: 31–132, 206–212 nn. 8–50; 2008: 14).

Forgers copy both forgeries and excavated artifacts. They also create pastiches, utilizing a genuine core with the addition either of non-related ancient or modern-made elements, or add engraved scenes to genuine unadorned plaques or vessels. Forgers often attempt to create a *unikum*, a hitherto unrecorded type of artifact and therefore all the more valuable to customers and scholars (Butcher and Gill 1993: 386; Muscarella 2000a: 17–19, 209 n. 31; 2006: 166–167).

Scholarly awareness of forgeries of ancient Near Eastern artifacts began in the late 19th and early 20th centuries but then declined (Muscarella 1977b: 154–155, 169 n. 68; 2000a: 9). Early discussions were primarily concerned with a specific object or inscription, many of them alleged to be Hebrew and Christian texts. At present, relatively few scholarly references to forgeries occur in archaeological literature, often through ignorance, but also because some scholars deliberately suppress discussions to defend themselves or colleagues, which deeds play a significant role regarding general ignorance of their existence (Muscarella 1977b: 154–156, 161–163; 1980: 117–118 n. 3; 2000a: 2–5, 7–10, 12; Butcher and Gill 1993: 387, 396, 399 n. 4, 396 n. 36). Thousands of forgeries of Ancient Near Eastern antiquities have been created and sold in the post-World War I period. All antiquity dealers sell forgeries and some have collaborated with forgers for decades, especially those in Iran.

Forgeries exist of every conceivable type of ancient artifact and material. Following a significant archaeological discovery or a recent plunder, forgers immediately begin copying the excavated artifacts, a practice not limited to the Near East (see Butcher and Gill 1993; Lapatin 2000: 18–28). Forged Iranian antiquities are very common, resulting in countless examples based on artifacts from Marlik, Luristan, the Achaemenian period, Ziwiye, Jiroft and Kalmakarra Cave (Muscarella 1977c: 78–79; 2000a: 44–133; 2001; 2003).

The involvement of archaeologists

Professional behavior of archaeologists is an important component of this review. A good number remain indifferent (Muscarella 2000a: 26, n. 8; 2007; 2009a: 395–396, 398–405) or are troubled solely within the areas they excavate, fully ignoring others. Some archaeologists remain unaware of the plunder culture and the contextual existence of unprovenanced

antiquities possessing only modern provenances; as students they were never informed by their professors (Muscarella 2000a: 9–10), and they pass down their lack of knowledge. Some fully ignore it. Further, *nota bene*, many university- and museum-employed archaeologists actively support antiquity acquisitions. They collaborate with and advise dealers and collectors on their purchases (Muscarella 1977b: 160, 163–164; 2000a: 3–8, 13–15; 2009a: 398–403 and n. 38; Vitelli 1984: 152–154) or write muted apologies for their roles (Muscarella 1980; Cook 1995). Archaeologists write articles and provide guidance for the antiquity dealer-owned magazine *Minerva* (Muscarella 2009a: 403 n. 38) and ones promoting antiquity collecting, such as *Odyssey*. Some meet socially with dealers and collectors for collaborative purposes, providing them with advice, and give lectures on their excavations and research, seeking prestige and financing (Muscarella 2000a: 23–25 n. 5; 2007: 612–614; 2009a: 401). Others accept employment with collectors, dealers and auction houses recommended by their archaeologist professors.

Some archaeologists have also functioned as antiquity dealers themselves (Butcher and Gill 1993); others actively support them (Muscarella 2000a: 7–8, 23, 25–26 nn. 7 and 8). Some have stolen artifacts from their sites and sold or donated them to foreign museums and collectors. The most outstanding cases were Heinrich Schliemann (1822–1890), Roman Ghirshman (1895–1979), and Ernst Herzfeld (1879–1948). Herzfeld was one of the most brilliant (and devious) Iranian archaeologists known. He stole many artifacts that he himself had excavated at Persepolis and other sites, and then illegally, contrary to archaeological principles, smuggled them abroad via Swedish and German diplomatic luggage. He (and his sister) then sold these on to several museums; he also sold forgeries (Majd 2003: 73, 197, 199, 200–204; Muscarella 2005). One example, looted from Persepolis and now in the Metropolitan Museum of Art (MMA), is a foot with an etched Greek drawing, cut from a relief by Herzfeld and smuggled abroad (Muscarella 2005: 431). Nevertheless, scholars continue to defend Herzfeld's crimes, claiming that he was merely "an avid collector of antiquities ... he collected small objects" ("avid" here being a synonym for lust and passion, thereby justifying rapists, those of the earth and others: Muscarella 2000a: 12, 23–24 n. 5); only mentioned in a footnote are his sales to the MMA of "artifacts from the Persepolis excavations" (Mallampati 2005: 111–112, 116; Muscarella 2005). Such behavior remains unfamiliar to most scholars, students and the public. In the past, archaeologists did sometimes purchase antiquities from dealers, which was not considered a cultural crime at the time, and their collecting cannot be judged by modern standards – a case in point is André Godard (see Muscarella 1977a: 197; whether Godard sold antiquities is unknown). Roman Ghirshman looted artifacts from his own sites and then gifted them to foreign museums, which led to his being awarded Life Membership of the MMA (in 1957); he also sold antiquities (Muscarella 2000a: 25–26 n. 7).

All the artifacts sold/donated by Herzfeld and Ghirshman were illegally removed, thefts from Iran, their legal owner. As for Arthur Upham Pope (1881–1969), he was one of the most

powerful and duplicitous individuals involved in the destruction of Iran's culture. He warrants discussion both because he and others have asserted he was an archaeologist (Mallampati 2005: 112), although he was not, and because he was for 45 years one of the most active Iranian antiquity dealers known. Pope established archaeological organizations as scholarly fronts for his plundering activities, using them as camouflaged "archaeological" venues for his dealer activities. He commissioned thefts from Islamic shrines and purchased countless antiquities, smuggling them abroad in diplomatic pouches. His writings defend his archaeological responsibility to purchase and export antiquities, arguing that forgeries (that he and others sold) were a minor collaborative problem (Muscarella 2000a: 209–211 nn. 36 and 38; Majd 2003: 29–53).

Another serious problem is that many academics (and thus their students) unhesitatingly cite as reality the certification of curator/archaeologists that *purchased* or donated artifacts are genuine and *archaeological* evidence for cultural history. They also declare as archaeological fact a specific geographical provenience, a locus, for the purchased object, which information was furnished by a dealer (although never mentioned). Museum-ritual demands that one eliminate the crucial empirical distinctions between excavated and plundered artifacts, thus falsifying the historical record. Research on unexcavated antiquities permits scholars merely to study mute, plundered antiquities only in a phenomenological sense, to attribute them to a particular culture and date through connoisseurship. Because in ancient times artifacts were sold, gifted or dedicated to faraway centers, archaeologists cannot attribute them to their depositional site, even if the culture can be determined (Muscarella 1977a; 2000a: 13–14; Elia 1997). Therefore, unexcavated antiquities, along with (unexcavated) forgeries, both attributed to ancient sites or cultures, create a fragmented and fictional history of the past.

Plundering the Iranian past

Looting is the basis for all current plundering, evidenced by the vast number of destroyed sites throughout the Near East. These activities increased in the 19th century, a result of the renewed interest in antiquity and fueled by a fulfillment of social ambitions exemplified by the increased collecting of antiquities by museums and private collectors everywhere (Meyer 1973: 46–47, 191–197). Plunder existed at this time in Iran – for example, Hamadan, the Median capital, violated in the 1890s. In the 1920s exploitation in Iran expanded, initiated by the destructions of Luristan cemeteries, financed by Iranian dealers prodded by their growing number of foreign customers. Luristan continued to be plundered for decades, and thousands of its antiquities have been purchased (Muscarella 1988: 112–120, 136–206). Thanks to years of excavations by Louis Vanden Berghe, scores of intact tombs were recovered, providing for the first time local cultural contexts. Only one Luristan habitation site has been excavated: Surkh Dum, in the 1930s (Muscarella 1988: 115–135).

And contrary to the belief among some archaeologists, sites in Iraq, a state with anti-plunder laws, were also being looted in the 1920s and 1930s. Numerous Iraqi antiquities were smuggled for sale to Iran, a state with no anti-plunder laws. Hence, for decades scholars accepted as archaeological fact that Mesopotamian artifacts, some bearing royal inscriptions, derived from Iranian sites. Such presumptions resulted in erroneous historical interpretations of alleged ancient Mesopotamian contacts east of the Zagros Mountains (Muscarella 2000a: 15, 18–21 n. 36). Forgers of provenience, they produced a concomitant forgery of history, generated from scholar-dealer cooperation, which is not the only example (Muscarella 1977b: 162–163; 1977c: 77–78). Scholars have also attributed stray Luristan antiquities encountered as deriving from Armenia, the Caucasus, Iraq and Anatolia. Luristan antiquities displayed in the Adana and Van Museums in eastern Turkey were confiscated from Iranian smugglers. I also saw in a Van jewelry shop a lion pin stolen and smuggled from Hasanlu in Iran (Muscarella 1988: 112–113, 115; 2000a: 214 n. 56). Plundering essentially ceased during World War II, but soon thereafter recommenced extensively across the Near East. The prime cause was the appearance of more Luristan material.

More momentous was the sudden appearance of exquisite, hitherto unknown antiquities purported by dealers and archaeologists (e.g., André Godard and Roman Ghirshman) to have been discovered in 1947 at Ziwiye, in western Iran (Muscarella 1977a; 1988: 342–349). Museums and collectors all over the world soon thereafter purchased them, and this continued for years as more “Ziwiye” material surfaced. A number of the bronze, gold and silver objects had been cut into pieces and partitioned among the plunderers, an action resulting in scores of fragments sold all over the world (Hiebert and Cambon 2008: 67–79). The partition required years of work by scholars to sort out and match the scattered fragments. Moreover, it was impossible to know how many of the hundreds of artifacts purported to have come from Ziwiye were actually recovered there or in fact came from elsewhere (other sites, e.g. Qaplanlu, have been proffered by dealers). Excavations at Ziwiye by American and Iranian archaeologists recovered not a single comparable artifact, but a historically important Urartian 7th century BC seal was excavated there. The Ziwiye episode epitomizes the utter destruction of a complex polity’s integrity and culture, and led to increased plundering across Iran. Thus, following excavation in the southwest Caspian region at Marlik, sites in the area were subsequently attacked. It took Ezat Negahban 11 continuous months to complete his excavations at Marlik (November 1961 through October 1962), harassed continuously by thugs who attacked his camp, demanding the site for themselves (Muscarella 2000c). The Iranian government had to send police in to protect him.

One egregious example is the plunder in 2001 of a number of cemeteries exposed by flooding to the south of Jiroft, in southeastern Iran. Locals discovered intact burials filled with artifacts and immediately began, not accidentally, to seek out others, selling their finds to eager, indeed rapacious, dealers. Simultaneously, forgeries were manufactured and sold

alongside the genuine loot, all labeled as “from Jiroft” (Muscarella 2001). Subsequent archaeological activity in the area neglected to investigate these cemeteries, to find out, as Vanden Berghe did in Luristan, whether some burials had been missed; this was a serious archaeological blunder.

Case studies

Bitumen roundels

One group of Elamite forgeries that catches our attention when seeking problem pieces are the unexcavated small bitumen roundels, ca. 10 cm. They display a forward-facing bearded male with side hair curls, or a central rosette surrounded by rams in a low relief, and one example has a central protruding knob; the rim is surrounded by a rope pattern (viz. Muscarella 1988: 227–228, Figs. 16–18). Of the roundel corpus only four fragmented examples have been excavated, all in southern Iran: two at Haft Tepe and two at Susa, all with a central rosette surrounded by reclining rams, dated to the Middle Elamite period, ca. 14th–13th centuries BC (Negahban 1984: 6, Figs. 3–6). There also exists, albeit plundered, two precise parallels for the deity heads on the roundels. One is on an Elamite helmet in the Metropolitan Museum of Art (Muscarella 1988: 224, Figure 1b) depicting a frontal male deity flanked by two females, the other occurs on another helmet (*Trésors de L’Ancien Iran*, Geneva 1966, no. 536, Pl. 32). The deity has the very same projecting bearded face and side curls as the roundel deity figures. Focusing on the unexcavated roundels with a frontally facing bearded male, there are 12 examples; some preserve the original silver or gold overlay. They exist in the Metropolitan Museum of Art (ex-Norbert Schimmel collection), The Los Angeles County Art Museum, a Texas private collection, The British Museum, The Louvre (two examples; Amiet 1977), the Tehran Museum, in the Pierre Amandry collection (Negahban 1984, Nos. 5–12, Figs. 7–13; Muscarella 1988: 228, nn. 4–7). Other examples have been offered for sale by auction houses. Seven of the 12 roundels appear to be ancient, and I believe that five are forgeries or at least problematic:



Figure 5.2 *Bitumen Roundels*: [a] Los Angeles Art Museum; [b] Private Texas Collection; [c] Drouot Rive Gauche July 11, 1979 sales catalogue, No. 13; [d] Sotheby's New York sales catalogue December 14, 1993, No. 25; [e] Christie's sales catalogue 2004, No. 406; [f] Jerome Eisenberg, *Art of The Ancient World*, 1965, No. 94.

1. Los Angeles County Art Museum: very close in all features to the Texas example (no. 2, below; Muscarella 2000a: 130, no. 2). As the Museum catalogue entry (p. 105) notes, "The piece has been extensively repaired in modern times. It is no longer easy to establish by eye how much of it is ancient" (Figure 5.2a).
2. Texas collection (Muscarella 2000a: 131, no. 3); compare the Los Angeles example above (Figure 5.2b).

3. Antiquity dealer sales catalogue, Drouot Rive 1979, no. 13: (Muscarella 2000a: 131, no. 6). It is remarkably close to Hotel Drouot 1996, no. 177, which may be ancient, but there the rams face right, as in all other cases, while here rams face left ([Figure 5.2c](#)).
4. Antiquity dealer sales catalogue, Sotheby's 1993, no. 25 (Muscarella 2000a: 131, no. 5) ([Figure 5.2d](#)).
5. Antiquity dealer, Jerome Eisenberg, Christie's 2004, no. 406 ([Figure 5.2e](#)). The obvious problems are the execution of the heads and depiction of all its facial features, the hair, eyes, lips, beard and side curls; also the dotted hair patterns on the rams; and in one case, no. 2, the rams face left, not the common right. All the unexcavated roundels with a central rosette appear to be ancient, but a gold(?) disc owned by a dealer with four recumbent rams around a central knob (Muscarella 2000a: 130, no. 1) is a very obvious modern production ([Figure 5.2f](#)).

The “Kalmakara Cave” Silver Rhyton

The Kalmakarra Cave in Luristan in the early 1990s reportedly yielded scores of hitherto stylistically unknown artifacts (a corpus of perhaps hundreds of silver antiquities dating to the 7th century BC) that have surfaced in the antiquities market (Muscarella 2000b: 30, n. 6).

One of the prominent objects belonging to this group is a silver rhyton. The vessel is an enclosed hollow griffin; its body is formed from two joined units with head, wings and feet added. Two upright funnels project from the sides, and one from the griffin's anus, allowing liquid to be supplied and then to flow from the hollow interior. It is approximately 17.5 cm in length, 20 cm in height ([Figure 5.3a](#)). Needless to add, no other vessel known has an anus spout. Surely the forger thought he was clever by creating this feature, an *unikum* that would catch the eyes and money of museums and antiquities collectors: he was correct.

The griffin rhyton arrived in the United States in 2000 and was sold to Paula Cussi, a billionaire collector and Trustee of The Metropolitan Museum of Art, by the antiquities dealers Hicham and Ali Aboutaam. Cussi first saw it at their Geneva gallery in 1999 where she was informed that it had derived from the Kalmakara Cave in Iran, and its authenticity had been verified for them by three conservator specialists, Tom Chase, Jack Ogden, and Peter Meyers. All authenticated it as ancient, two specifically attributing it to this cave. Peter Northover of Oxford University also examined a metal sampling, but I have no information regarding his conclusion. Cussi agreed to pay the Aboutaams \$950,000 when they delivered the griffin to her home in New York City, which she did in 2002. However, when importing the griffin, they claimed that it derived from Syria. Somehow the U.S. Department of Immigration and Customs Enforcement (ICE; later the Department of Homeland Security) became aware of the Syria lie and on that basis in December 2003 confiscated the griffin. The Aboutaams were also fined \$5,000 and ordered to return to Cussi her purchase price. This event was reported in

various newspapers shortly thereafter, in 2004; no photographs were published (Klein 2010).



[Figure 5.3 Objects from the Kalmakara Cave: \[a\] Silver Rhyton \(ex-Aboutaam collection\); \[b\] Lion attacking a bull \(Aboutaam collection\); \[c\] Silver rhyton \(MIHO Museum, Japan\).](#)

I first viewed the griffin via photographs sent to me in November 2006 by the scholar Wouter Henkelman, who had examined it from a photograph provided by James McAndrew, an ICE agent, and accurately considered it “a very bad forgery”, “a parody”. On November 6, 2006, Paul Kunkel, who was researching the Kalmakara Cave plunder, told me he had watched a WCBS-TV video (November 4) that showed a journalist, Melissa Klein, with James

McAndrew showing her confiscated objects in the Agency's Queens Warehouse; the griffin was in the background. Years later, on June 6, 2010, the *New York Post* published an article by Klein about her viewing of antiquities in the warehouse. Singled out and illustrated was the silver griffin, which I believe was its first public viewing. It was declared to have been looted from an Iranian cave, and the Kalmakara Cave was the provenance cited in later reports. From the nature of a number of inscriptions, they were identified as Late Elamite; that is, according to the sales catalogue of H. Mahboubian [no date, post 1979], where it is claimed that they are "Median, 10th–9th century BC", and the property of his families' collection since 1934. Kunkel and I sent McAndrew and another agent requests to see the griffin or good photographs; we were refused, albeit they had been sent to Henkelman years earlier. I first published comments on the griffin in 2008 (pp. 14–15), and then in 2010 and 2012 (pp. 186–187); see also Klein (2010).

In September 2013 the griffin surfaced again, in a new and politically unfortunate event. It was announced in various newspapers, blogs and TV in Iran and elsewhere that President Obama was "returning" the rhyton to Iran as a sign of good will. I emailed two colleagues in Iran and notified them that the griffin never derived from Iran and that it was an obvious forgery, citing my articles. They immediately informed the Iranian authorities who began an investigation. For several weeks thereafter reports on the Internet (viz. Susan Mazur: SCOOP, October 9 and 15), and in newspapers in Iran and Israel highlighted the forgery issue. But not one newspaper in the U.S. reported it. Obviously President Obama did not know his gift was a forgery, for he had correctly asked the Queens warehouse staff for a confiscated Iranian antiquity. He was deceived by one or more of its government employees who had been informed that it was a forgery.

Lion attacking bull

In 2003 I received photographs from Wouter Henkelman of a sculpture of a lion attacking a reclining bull, apparently bronze. He had received it from James McAndrew. I believe it was also in the possession of the Aboutaams ([Figure 5.3b](#)). Henkelman recognized it as a manifest forgery, poorly copied from a plundered genuine example in the Kalmakara Cave corpus (Mahboubian, no. 14): one need merely glance at the two objects together. I published it as a forgery but the photograph I supplied was omitted (Muscarella 2012: 187). I believe all the objects published by Mahboubian in his sales catalogue are ancient; they are masterpieces of workmanship.

Assurbanipal's beaker

The MIHO Museum in Japan purchased a silver beaker bearing an Assyrian royal scene,

troops, chariots, musicians, attendants, captives in three circular panels with a fourth, the lowest, bearing a floral pattern ([Figure 5.3c](#)). It has two inscriptions, one of Assurbanipal in Akkadian on the outer rim, and one by a Neo-Elamite king on the inner rim. Its publisher, Erika Bleibtreu (1999: 21) was aware that it was recovered from somewhere in a cave (Kalmakara was not mentioned). To Bleibtrau the vessel's decoration is classic Assyrian in style and décor, and she indicates that it was taken to Iran by Medians in 612 BC, there later to be inscribed by the Elamite king in ca. 550 BC. The vessel itself is ancient.

Interesting is that the scene took much time to engrave, and yes, by a competent and skilled engraver. Therefore, it is imperative that more than one analysis by honest and competent technicians be accomplished to help resolve whether it is modern or ancient workmanship. The scene is of Assyrian art, but inasmuch as it has both an Elamite inscription and a forged ancient history, I think it appropriate to consider the beaker in this chapter. I first published it in Muscarella 2000b and then in 2014: 48–49, demonstrating that the *sogennant* Assyrian scene is modern, a clever but obvious forgery with many blunders and misrepresentations added in modern times. My forgery conclusion has been accepted by Bo Lawergren (2000), Pauline Albenda (2001) and Henkelman (2003: 216 and n. 128), but Pierre Amiet (2000: 190) accepts the scenes as ancient. I suggest that the MIHO Museum hire two separate conservators to examine the method of the engraving and attempt to discover when the scene was engraved on the vessel.

Miscellaneous “Elamite” forgeries

- (1) A small (height 7 cm) silver vessel depicting a seated figure, a harp player and an attendant ([Figure 5.4a](#)) is very crudely executed in all features: Antiquity dealer sales catalogue, Christie's, London 2011, pp. 210–211. For a genuine excavated parallel for the scene (probably its model), see Harper et al. 1992, no. 51.
- (2) A crude, non-distinct 10 cm high bronze nude bearded male ([Figure 5.4b](#)) Merhav (1981, no. 83, 115) says it is “probably Elamite”. For other examples, see Muscarella 2000a: 131–132, nos. 11–13.
- (3) A copper bronze finial with two crudely executed animals ([Figure 5.4c](#)): antiquity dealer sales catalogue, Sotheby's New York, June 12, 2001, no. 135.
- (4) A bitumen protome vessel with a projecting animal head and carved horns, eyes and crudely incised body lines ([Figure 5.4d](#)), antiquity dealer sales catalogue, Hotel Drouot May 22, 1989, no. 478; Muscarella 2000a: 131, no. 9. Is the vessel and head damaged and ancient, and later embellished? For a genuine example of an ibex projecting from a vessel from Choga Mish see *7000 Jahre persische Kunst*, Wilfried Seipel (ed.), SKIRA 2003, no. 40.
- (5) In Muscarella 2000a: 131, nos. 7, 8, I cited two small fragmented stone plaques, no. 7

depicting in relief a king holding a dagger and a staff, no. 8 a broken-away winged figure grasping to his left an ostrich by the neck, followed by a crowned and bearded human-headed lion holding (missing) objects in his upright hands. I may have been wrong regarding no. 7, but cannot avoid thinking no. 8 may be a forgery; it is at least suspicious. For a genuine similar-sized stone plaque with two males holding daggers and facing left see Harper et al. 1992: 201, no. 142; for a figure grasping an ostrich, see Collon 1987, nos. 350, 405.



Figure 5.4 [a] Silver vessel, Christie's sales catalogue, London 2011; [b] Bronze nude male; [c] Copper/bronze finial (Sotheby's New York, June 12, 2001, No. 135); [d] Bitumen vessel (Hotel Drouot May 22, 1989, No. 478).

Bibliography

- Albenda, P. 2001. Review: Ein vergoldeter Silberbecher der Zeit Assurbanipals im Miho Museum: Historische Darstellungen des 7. Jahrhunderts v. Chr by Erika Bleibtreu. *Journal of the American Oriental Society* 121: 145–146.
- Amiet, P. 1977. Appliques iraniennes. *La Revue du Louvre* 1977/2: 63–69.
- . 2000. (Review Work) Ein vergoldeter Silberbecher der Zeit Assurbanipals im Miho Museum. Historische Darstellungen des 7. Jahrhunderts v. Chr., Archiv für Orientforschung, Beiheft 28, 1999 by Erika Bleibtreu. *Revue Archéologique* 94: 190.
- Atwood, R. 2004. *Stealing History*. New York: St. Martin's Press.
- Bator, P.M. 1982. An Essay on the International Trade in Art. *Stanford Law Review* 34/2: 275–384.
- Bleibtreu, E. 1999. Ein Silberbecher Assurbanipals (668–627). *Archiv für Orientforschung* 28: 21–30.
- Brodie, N. and Renfrew, C. 2005. Looting and the World's Archeological Heritage: The Inadequate Response. *Annual Review of Anthropology* 34: 343–361.
- Brodie, N., Doole, J. and Watson, P. 2000. *Stealing History. The Illicit Trade in Cultural Material*. Cambridge: The McDonald Institute for Archaeological Research.
- Butcher, K. and Gill, D.W.J. 1993. The Director, the Dealer, the Goddess and Her Champions: The Acquisition of the Fitzwilliam Goddess. *American Journal of Archaeology* 97: 383–491.
- Christie's 2004. Sales Catalogue. London.
- Collon, D. 1987. *First Impressions*. Chicago: University of Chicago Press.
- Cook, B. 1995. The Trade in Antiquities: A Curator's View. In: Tubb, K.W. (ed.) *Antiquities Trade or Betrayed. Legal, Ethical & Conservation Issues*. London: Archetype Publication, 181–192.
- Eisenberg, J. 1965. *Art of the Ancient World*. Royal-Athena Galleries, London.
- Graepler, D. 2004. Archäologie und illegaler Antikenhandel: Die Rolle der Universitäts-sammlungen. In: Heilmeyer, W.-D. and Eule, J.C. (eds.) *Illegale Archäologie?* Berlin: Weißensee Verlag, 116–130.
- Grann, D. 2010. The Mark of a Masterpiece. *The New Yorker*, July 12 and 16: 50–71.
- Greenfield, J. 2007. *The Return of Cultural Treasures*, 3rd ed. Cambridge: Cambridge University Press.
- Harper, P.O. et al. 1992. *The Royal City of Susa*. Metropolitan Museum of Art. New York.
- Henkelman, W. 2003. Persians, Medes and Elamites. Acculturation in the Neo-Elamite Period. In: Lanfranchi, G.B., Roaf, M. and Rollinger, R. (eds.) *Continuity of Empire (?). Assyria, Media, Persia*. Padova: S.a.r.g.o.n., 181–231 and Pl. 9–15.
- Hiebert, F. and Cambon, P. (eds.) 2008. *Afghanistan. Hidden Treasures from the National Museum, Kabul*. New York: National Geographic Magazine.
- Hotel Drouot. 1996. Sales Catalogue. Paris.
- Klein, M. 2010. Rogue's Gallery- the Queens Warehouse that Holds a Fortune in Stolen Art. *New York Post*, June 6, 2010.
- Koczka, C.S. 1989. The Need for Enforcing Regulations on the International Art Trade. In: Messenger, Ph.M. (ed.) *The Ethics of Collecting Cultural Property*. Albuquerque, NM: University of New Mexico Press, 185–208.
- Lapatin, K.D.S. 2000. Boy Gods, Bull Leapers, and Mother Goddesses. *Source* 20/1: 18–28.
- Lawergren, B. 2000. Incongruous Musical Instruments on an Alleged Assyrian Beaker. *Source* 20/1: 38–42.
- Löw, U. 1993. Kunsthandel und Fälschungsproblematik. *Mitteilungen des Deutschen Archäologen-Verbandes e.V.* 24/1: 36–

- Mackenzie, S.R.M. 2005. *Going, Going, Gone: Regulating the Market in Illicit Antiques*. Leicester: Institute of Art and Law.
- Mahboubian, Houshang (no date; post 1979) *Treasures of the Mountains* (a camouflaged sales catalogue).
- Majd, Mohammad Gholi 2003. *The Great American Plunder of Persia's Antiquities 1925–1941*. Lanham, MD: University Press of America.
- Mallampati, H. 2005. Archaeology and Collecting: Law, Ethics, Politics. In: M.C. Root (ed.) *This Fertile Land. Signs + Symbols in the Early Arts of Iran and Iraq*. Ann Arbor, MI: Kelsey Museum of Archaeology, 109–125.
- Merhav, R. 1981. *A Glimpse into the Past. The Joseph Ternbach Collection*. Jerusalem: Israel Museum.
- Meyer, K.E. 1973. *The Plundered Past. The Traffic in Art Treasures*. New York: Atheneum.
- Muscarella, O.W. 1977a. “Ziwiye” and Ziwiye: The Forgery of a Provenience. *Journal of Field Archaeology* 4: 197–219.
- . 1977b. Unexcavated Objects and Ancient Near Eastern Art. In: Levine, L. and Young, T.C. (eds.) *Mountains and Lowlands. Essays in the Archaeology of Greater Mesopotamia*. Malibu: Undena Publications, 153–205.
- . 1977c. The Archaeological Evidence for Relations Between Greece and Iran in the First Millennium B.C. *Journal of Ancient Near Eastern Studies* 9: 31–57.
- . 1980. Die gefälschte Kunstgeschichte. Ein Hausputz in der Vorderasiatischen Altertumskunde? A Reply. *Acta praehistorica et archaeologica* 11–12 (1980–1981): 117–120.
- . 1988. *Bronze and Iron. Ancient Metal Artifacts in The Metropolitan Museum of Art*. New York: The Metropolitan Museum of Art.
- . 1995. Bazaar Archaeology. In: Finkbeiner, U., Dittmann, R. and Hauptmann, H. (eds.) *Beiträge zur Kulturgeschichte Vorderasiens. Festschrift for Michael Boehmer*. Mainz: von Zabern, 449–453.
- . 2000a. *The Lie Became Great. The Forgery of Ancient Near Eastern Cultures*. Groningen: Styx.
- . 2000b. Excavated in the Bazaar: Ashurbanipal's Beaker. *Source* 20/1: 29–37.
- . 2000c. Review of Löw, 1998. *Bibliotheca Orientalis* 57: 188–196.
- . 2001. Jiroft and “Jiroft-Aratta”. A Review Article of Yousef Madjidzadeh. *Jiroft: The Earliest Oriental Civilization. Bulletin of the Asia Institute* 15: 173–198.
- . 2003. Museum Constructions of the Oxus Treasure: Forgeries of Provenience and Ancient Culture. *Ancient Civilizations from Scythia to Siberia* 9/3–4: 259–275.
- . 2005. Review of *Ernst Herzfeld and the Development of Near Eastern Studies, 1900–1950*, edited by A.C. Gunter and S.R. Hauser, Leiden, 2004. *Journal of the American Oriental Society* 125: 431–432.
- . 2006. Urartian Metal Artifacts: An Archaeological Review. *Ancient Civilizations from Scythia to Siberia* 12: 147–175.
- . 2007. Archaeology and the Plunder Culture. *International Journal of the Classical Tradition* 24/3–4: 602–618.
- . 2008. The Veracity of Scientific Testing by Conservators. In: Pernicka, E. and von Berswordt-Wallrabe, S. (eds.) *Original – Copy – Fake?*, Mainz am Rhein: von Zabern, 9–18.
- . 2009a. The Fifth Column in the Archaeological Realm: The Great Divide. In: Saglamtimur, H., Derin, Z. and Abay, E. (eds.) *Studies in Honor of Altan Çilingiroğlu. A Life Dedicated to Urartu on the Shores of the Upper Sea*. Istanbul: Arkeoloji ve Sanat Yayınları, 395–406.
- . 2009b. A Review and Addenda: Michael Gross's Rogues' Gallery. *Scoop* (website), September 16: 1–17,

www.scoop.co.nz/stories/HL0909/S00139.htm. Accessed 14 July 2015.

- . 2010. The Griffin in Queens: Its Modern History. *SAFECORNER* (website), June 11, savingantiquities.org.
- . 2012. An Unholy Quartet: Museum Trustees, Antiquity Dealers, Scientific Experts, and Government Agents. In: Fahimi, H. and Alizadeh, K. (eds.) *Nāmvarnāmeḥ. Papers in Honour of Massoud Azarnoush*. Tehran: IranNegar Publication, 185–190.
- . 2014. Forgeries of Ancient Near Eastern Artifacts and Cultures. In: Brown, B.B. and Feldman, M.H. (eds.) *Critical Approaches to Ancient Near Eastern Art*. Berlin: De Gruyter, 31–53.
- Nagin, C. 1986. Patrons of Plunder. *Boston Review* (August) 5–6: 23–25.
- Negahban, E.O. 1984. Haft Tepe Roundels: An Example of Middle Elamite Art. *American Journal of Archaeology* 88: 3–14.
- Renfrew, C. 2000. *Loot, Legitimacy and Ownership: The Ethical Crises in Archaeology*. London: Duckworth.
- Seipel, W. (ed.) 2003. *7000 Jahre persische Kunst: Meisterwerke aus dem Iranischen Nationalmuseum in Teheran Broschiert*. Skira Verlag, Milan.
- Silver, V. 2006. The Role of Museum Trustees. *Bloomberg News*, February 25: 1–13.
- Simpson, E. 2005. Tall Tales: Celts, Connoisseurs, and the Fabrication of Archaeological Context. *Source* 24/2: 28–41.
- Stanish, C. 2008. Forging Ahead. *Archaeology* 18 (May/June): 58–66.
- Vitelli, K.D. 1984. The International Trade in Antiquities: Archaeological Ethics and the Archaeologist's Responsibility. In: E.L. Green (ed.) *Ethics and Values in Archaeology*. New York: Free Press.
- Wald, M.L. 2008. Tax Scheme Is Blamed for Damage to Artifacts. *New York Times*, February 4, 2008.
- Waxman, S. 2008. *Loot. The Battle Over the Stolen Treasures of the Ancient World*. New York: Times Books.

Part II

The land and peoples of Elam



CHAPTER SIX

Physical geography and environment of Elam



Cameron A. Petrie, Morteza Djamali, and Matthew D. Jones

Introduction

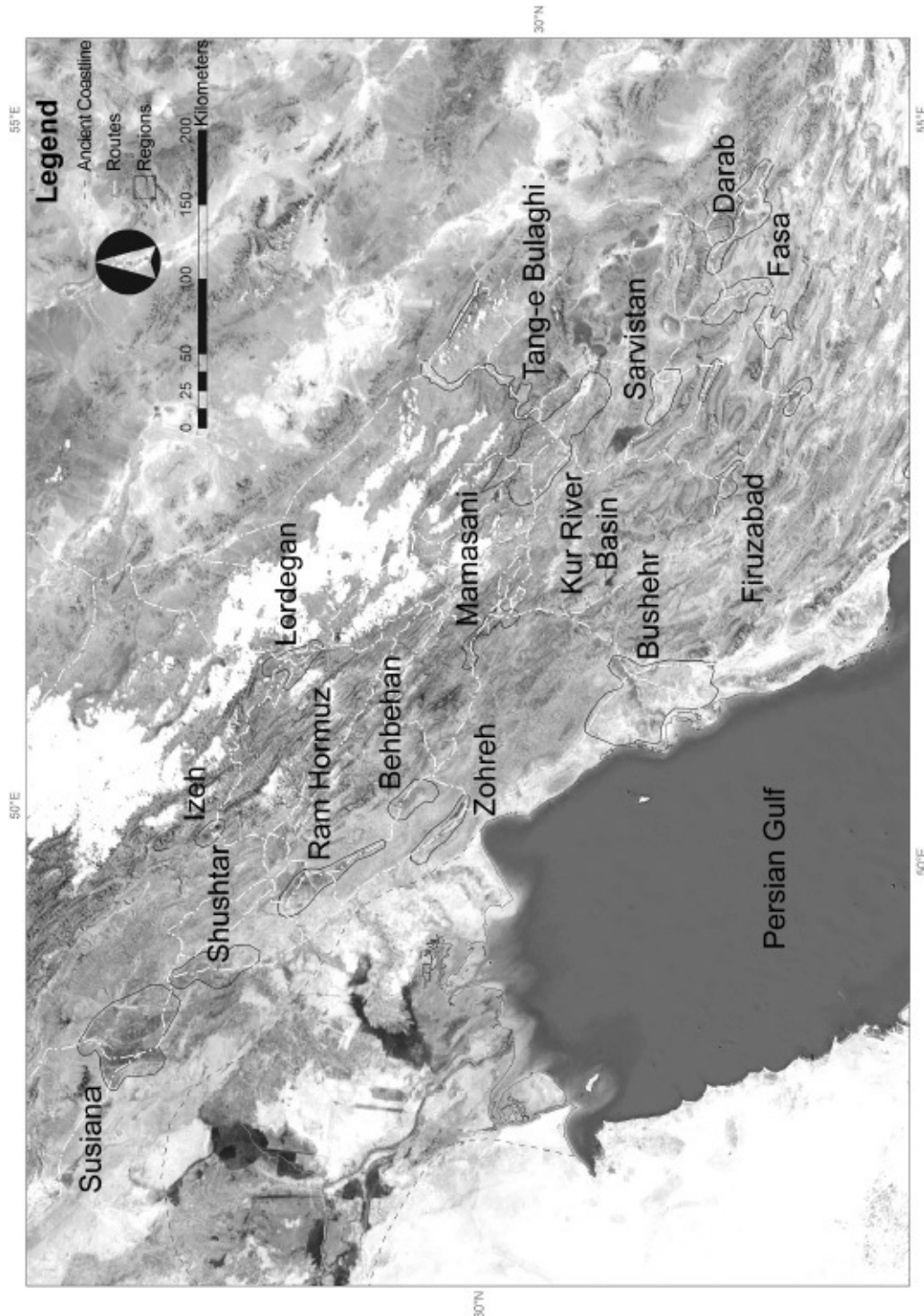
This chapter presents an overview of the physical geography and environment of ancient Elam. There have been various challenges to delineating the geographical limits of the cultural and political entity that was ancient Elam, initially stemming from early misunderstandings of the location of toponyms mentioned in Mesopotamian sources (Carter, E. and Stolper 1984; Vallat 1998; Potts 1999, 2016). For the purposes of this discussion of Elam's physical geography and environment, we consider all of the lowland and highland areas that were part of Elam at its greatest extent. In addition to discussing the geographical extent, geology, geomorphology, hydrology, climate and vegetation of the regions that make up ancient Elam, we also comment briefly about the historical conception of its geography.

Geographical extent of ancient Elam

Ancient Elam, broadly construed, spanned much of the south-western parts of the Iranian Plateau (Carter, E. and Stolper 1984; Potts 2016: 7–13), which is the key geographical feature that links Western Asia to the South Asian subcontinent and Central Asia (Petrie 2013a: 4). In essence Elam was comprised of a cross-section of the distinctive features and zones that make up the Zagros Mountain range ([Figure 6.1](#)). The ranks of high ridges of the south-western Zagros are flanked on the west by lowland piedmonts, alluvial plains and foothills, and within the uplands these ridges are separated by narrow linear and larger intermontane valleys, plains and alluvial and colluvial fans (Fisher 1968; Harrison 1968; Petrie 2013a: 6; Potts 2016: 16).

It is perhaps unsurprising that sedentary settlement in different parts of the Zagros is typically restricted to areas on the piedmonts, alluvial plains and valleys that have both adequate water resources and sufficient areas of arable land (Petrie 2013a: 6; Potts 2016: 16–18). These areas and the less arable uplands were, however, ideal for pastoralism. Only a

limited number of areas were suitable for extensive and intensive settlement in the past, and these are irregularly distributed (de Miroschedji 2003; Petrie et al. 2009; Petrie 2013a: 6). The primary regions that comprised ancient Elam are the lowland plains of Khuzestan, in particular the area of Susiana around the ancient capital of Susa (Shush/Shushan), and the highland regions of Fars, in particular the Kur River Basin and the capital cities of Anshan and Persepolis, which lie approximately 500 km to the southeast of Susa ([Figure 6.1](#); Potts 2016: 7–12). The coastal regions around Bushehr were almost certainly also a part of Elam during certain periods (e.g. Potts 2016: 15, 144, 168–169, 204, 230).



[Figure 6.1 Map showing the topographic variation of the regions that comprise ancient Elam, including the distribution of intermontane valleys and plains and the routes that are likely to have linked them together.](#)

Geology, geomorphology and hydrology

The ridges of the Zagros Mountain range generally stand between 2000–3000 m above sea level (asl), and some summits rise to 3500–4500 m asl (Fisher 1968: 3; Brookes 1982: 192; Roustaei et al. 2006: 17, 2009: 17; Potts 2016: 15–16). Geologically, the Zagros range is made up of several tectonic zones, and modern Fars province stretches across both the Zagros Crush Zone and the Zagros Folded Belt (Fisher 1968: 17; Harrison 1968: 166ff.; Stöcklin and Navabi 1973; Brookes 1989: 4–5; Roustaei et al. 2006: 17, 2009: 17). Most of the ridges of the Zagros Folded Belt are comprised of parallel limestone anticlines oriented from northwest to southeast (Stöcklin and Navabi 1973; Brookes 1989: 4–5; Roustaei et al. 2006: 17, 2009: 17).

The lowland regions of Elam are dominated by the extensive alluvial plains of Khuzestan, which are formed and watered by a range of rivers that drain large sections of the central and south western Zagros ([Figure 6.1](#)). These include the Karkheh, Dez, Karun, Marun and Zohreh Rivers, which have undergone a range of natural avulsions and human modifications on the plains over the last 8,000 years (Baeteman et al. 2004; Heyvaert 2007; Heyvaert and Baeteman 2007; Walstra et al. 2010, 2011). During the early and middle Holocene, the lower end of the Khuzestan plain was a low-energy tidal embayment under estuarine conditions, but rapid sea-level rise forced the coastline to transgress swiftly across the shelf (Jones et al. 2013). Deceleration of the relative sea-level rise after c.5500 cal BP/3500 BC, associated with more arid conditions, allowed coastal *sabkhas* to extend and aggrade while the position of the coastline remained relatively stable (Jones et al. 2013). During the late Holocene, deceleration of the relative sea-level rise continued, combined with a range of changes resulting from human impact, including the construction of extensive irrigation canal networks during the Sasanian period, which resulted in successive avulsions and the rapid deposition of alluvial fans from c. 2500 cal BP/500 BC (Baeteman et al. 2004; Heyvaert 2007; Heyvaert and Baeteman 2007; Walstra et al. 2010, 2011; also Alizadeh et al. 2004).

The alluvial plains of Khuzestan supported human settlement from the aceramic and the earliest phases of the ceramic Neolithic (Hole [ed.] 1987; Alizadeh 2003), and settlements of both periods are known in the adjacent Deh Luran Plain (Hole et al. 1969). The best-known and potentially most important ancient settlement in the greater region was the ancient capital of Susa (Shush/Shushan), which was one of, if not *the* major centre in the region from 5000 BC up to the Islamic period (Potts 1999: 45ff., 2016: 49ff.; Gropp 2005; Vallat 2008; Boucharlat 2009; Martinez-Sève 2015). Extensive and intensive surveys have enabled the reconstruction of settlement distribution over time in this area (e.g. Adams 1962; Johnson 1973; Wenke 1975–1976; Miroschedji 1981, 2003; Hole [ed.] 1987; Alizadeh 1992), and in archaeological terms it is

probably one of the best-understood regions of ancient Iran.

The largest intermontane plain in the upland regions of Elam was the Kur River Basin, which was formed by a combination of long-term erosion produced by rainfall and the action of various watercourses, including the Kur and Pulvar rivers. Taken as a whole, the Kur River Basin is more extensive than the plains of Khuzestan, though large areas are likely to have been covered by marshes until relatively recently (e.g. Kamjan marshes; Taylor 2016; 55–57). The Kur River Basin is known to have supported concentrations of human settlements from the late seventh/early sixth millennium BC onwards (Sumner 1990a, 1990b). It appears to have been settled by sedentary agriculturalists at some point after settlements appeared in lowland Khuzestan, though an aceramic Neolithic settlement has been discovered at Tappeh Rahmatabad, which is situated nearby at the mouth of the Tang-e Bulaghi (Azizi Kharanaghi et al. 2013). The largest and most important prehistoric settlement in the Kur River Basin was Tal-e Malyan, which was the highland capital of Anshan intermittently during the fourth, third, second and potentially also early first millennium BC (Carter, E. and Stolper 1984; Sumner 1988a, 2003; Alden 2013). During the Achaemenid period, Tal-e Malyan was supplanted first by Pasargadae and then Persepolis as the highland capital of Elam, which became Persis (Potts 2016: 307ff.). Like Khuzestan, this region has been subjected to several extensive and intensive surveys (e.g. Sumner 1972, 1990a, 1990b; Alden 1979, 2013).

In various locations scattered along the length of the Zagros chain between Khuzestan and the Kur River Basin, tectonic factors operating in tandem with long-term erosion of the softer sedimentary rocks have created linear intermontane basins, which have filled with sediments eroded from the surrounding mountain formations and piedmonts (Oberlander 1968; Stöcklin and Navabi 1973; Brookes 1982: 201; Roustaei et al. 2006: 17, 2009: 17). These basins include Shushtar, Lordegan, Behbahan, Zohreh, Mamasani and Kazerun. One or more rivers water most of these valleys and some of these watercourses flow through several valleys, for example, the Zohreh River, which rises in the high Zagros and passes through both the Mamasani and Zohreh valley systems before flowing into the Persian Gulf (Roustaei et al. 2006: 22, 2009: 22; Potts 2016: 19–20). Archaeological research in Behbahan, Zohreh, Mamasani and the coastal region around Bushehr has demonstrated that these regions had sedentary occupation from the ceramic Neolithic onwards (e.g. Dittman 1984; Carter, R. et al. 2006; Potts and Roustaei [eds.] 2006; Potts et al. [eds] 2009; Moghaddam 2016).

The area stretching between the modern cities of Kazerun and Mamasani, in the northern part of Fars, is situated along the Kazerun-Qatar Fault, which remains tectonically active and is known to have produced earthquakes and fractures at various points in the past (Berberian et al. 2014). The Cretaceous limestone formations in these areas are well developed, and this combined with the action of the Kazerun-Qatar fault means that karst develops easily, and there is thus an abundance of natural springs to support human settlement (Roustaei et al. 2006: 17, 2009: 17). The same geological processes have also produced faults at various points

throughout the ranges of the Zagros, and water flow has further eroded these faults, so that in many places deep gorges have formed (Fisher 1968: 18; Roustaei et al. 2009: 17). Many of these faults and gorges are currently used as passes that provide access between neighbouring plains, and they likely served this function in the past (Roustaei et al. 2009: 17; see below).

Environment and palaeoenvironment

The extensive geographical expanse of ancient Elam encompasses a considerable variety of environmental and climatic zones, with the upland and highland areas receiving markedly higher levels of annual precipitation than the areas of the central and more southern part of the plateau and the lowlands of Khuzestan, which are all significantly more arid (Ganji 1968; Petrie 2013a: 6; Potts 2016: 16–22). There is also seasonal variation in temperature and vegetation cover, with the highland areas having humid or semi-humid forests, while the more arid zones have steppe or desert vegetation (Bobek 1968; Petrie 2013a: 6).

Climate and climate change in the mid-late Holocene

As a whole, the climate of the Iranian Plateau is largely controlled by its topography and relative location to rain-bearing air masses. Most of the variability in mean annual temperatures across the plateau can be explained by latitude and altitude, with all locations showing substantial seasonal differences between warmer summers and colder winters. Average annual temperatures range from over 25°C in the southeast to below 12°C in the northwest, but the difference between winter and summer temperatures is over 25°C for much of the region (e.g. Jones 2013). Variation in precipitation is slightly more complex and many studies (e.g. Modarres and Sarhadi 2011, Poursaghar et al. 2012) have discussed the spatial and temporal distribution of rainfall across the plateau and the drivers of this variability. Total annual precipitation can reach over 1000 mm a year in the north, particularly around the shores of the Caspian Sea, and is often less than 100 mm a year in the south. Precipitation values are particularly low across the central desert basin due to the lee effect from the Zagros and Elburz mountains in the west and north, respectively. The majority of precipitation across the country falls in winter and spring (November through April), with some spatial differences in the timing of precipitation maxima. Most of the winter rain has a cyclonic source from the west, often via the Mediterranean, which tracks down the Zagros or picks up additional moisture from the Caspian Sea before falling. Spring rains fall in the northwest in particular, where northeasterly moving depressions are blocked by high pressure over the Caspian (Domroes et al. 1998). In the south, rainfall patterns can be additionally controlled by variability in the Indian Ocean, for example, due to increased moisture flux during positive phases of the Indian Ocean Dipole (Poursaghar et al. 2012).

There are presently four lake records that allow investigation of climatic change through most of the Zagros through the last 4000 years ([Figure 6.2](#)). All four describe a trend to generally more arid conditions since the mid-Holocene (5,000 cal. BP). More detailed reconstructions are constrained by sampling resolution, potential chronological issues at the sites and the interpretation of the climate proxies (e.g. Jones et al. 2013), but general trends are discussed here with those caveats in mind.

The oxygen isotope curves from Parishan, Zeribar and Mirabad show minimum values for the last 5,000 years somewhere in the second millennium BC, with extreme values being later further south. All records then show a trend to more positive values, flattening off around AD 500. Despite similarities in trends, interpretations of these records include changes in rainfall seasonality (Stevens et al. 2001; 2006), human activity in the catchment (Jones et al. 2015) and regional aridity trends. The titanium record from Neor Lake in northwest Iran shows a more detailed record of environmental change and suggests that the last 3,000 years were more arid than the preceding 2,000 with the exception of the '4.2 event' (Sharifi et al. 2015). The local impact of the 4.2 ka BP (c.2200 BC) event, and the preceding drought at 5.2 ka BP (c.3200 BC), is difficult to establish in most of the palaeoclimate records from Iran, though their climatic and cultural impacts are widely discussed for the wider region (e.g. Staubwasser and Weiss 2006; Kuzucuoğlu et al. 2011). The Neor record makes it clear that drought periods were not uncommon in the region through the mid- to late Holocene and also that many of these 'events' coincided with regional societal shifts (Sharifi et al. 2015).

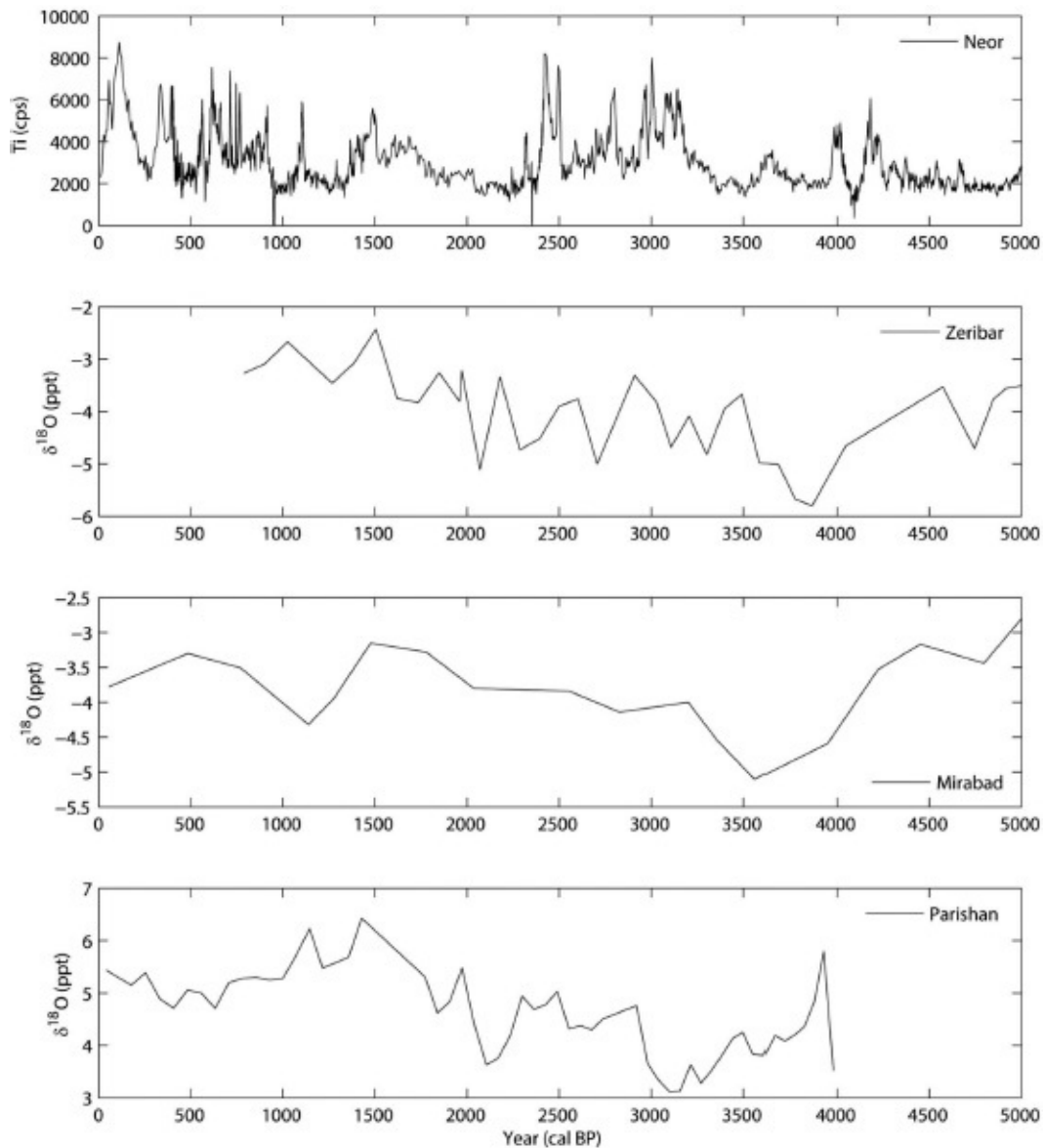
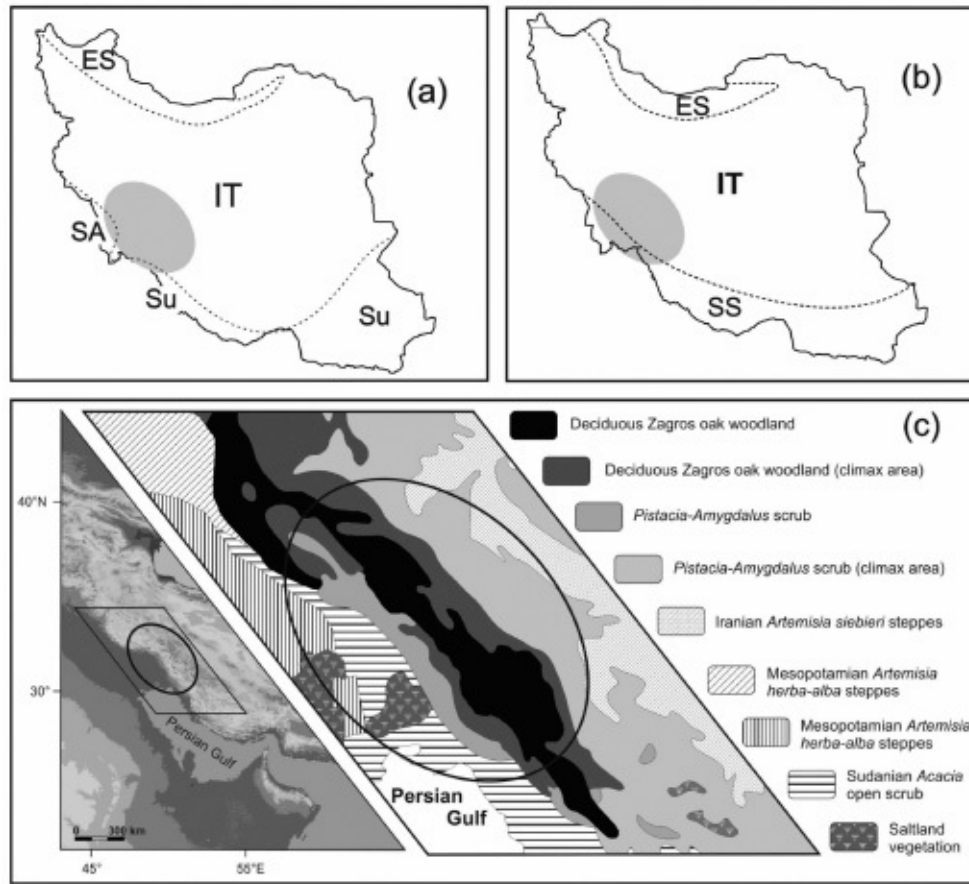


Figure 6.2 Four palaeoclimate records from lakes in the Zagros over the last 5000 years. The records are shown in a north (top)- south (bottom) gradient and include $\delta^{18}\text{O}$ records from Lakes Mirabad, Zeribar (Stevens et al. 2006) and Parishan (Jones et al. 2015) and the Ti record from Neor Lake (Sharifi et al. 2015).

Vegetation and biogeography

The areas of modern Fars and Khuzestan provinces mark the transition between two major phytogeographical regions of southwest Asia: the Irano-Turanian floristic region, which is mostly found in the Zagros highlands; and the Saharo-Sindian floristic region, which is mostly found in the Zagros lowlands and Mesopotamian plains (Figure 6.3a-b). The Irano-Turanian region is very rich floristically (>12,000 plant species), with its highest diversity concentrated over the Iranian Plateau, including the Zagros Mountains (Djamali et al. 2012). In Fars and Khuzestan, the Irano-Turanian region meets and interleaves with the Saharo-Sindian region, and this biogeographical encounter produces a very rich diversity of plant species, with the

simultaneous presence of elements that originate from both regions. Moving from north to south in Fars, the Irano-Turanian to Saharo-Sindian transition is best reflected by changes in the composition of the forest and scrub communities.



[Figure 6.3 Phytogeographical subdivision of Iran according to \(a\) Zohary \(1973\) and \(b\) White and Léonard \(1991\). Note that the transition from Irano-Turanian flora to Saharo-Sindian or Saharo-Arabian/Sudanian flora occurs within the ancient Elam; \(c\) shows the main vegetation types found in SW Zagros and Khuzestan plain in the Elam territory.](#)

In Fars, deciduous oak woodlands cover the higher elevations of the Zagros (mainly from 1000 to 2000 m; Figure 6.4a), which receive high annual levels of precipitation. In the southern Zagros, the oak woodland is almost exclusively dominated by Brant's oak (*Quercus brantii*), the most resilient species of oak, which ranges in elevation from 1055 to 2550 m (El-Moslimany 1986; Sagheb Talebi et al. 2014). In lower elevations, oak is mixed with more xerophytic species, mainly pistachio (*Pistacia atlantica* subsp. *mutica*), Montpellier maple (*Acer monspessulanum*), hawthorn (*Crataegus* spp.) and wild pear (*Pyrus glabra*), and forms different forest communities ([Figure 6.4b](#)). In still lower elevations that have drier conditions, pistachio is mixed with wild almond (*Amygdalus scoparia*), a xerophytic shrubby species, and finally, with increasing dry conditions, the latter tree becomes dominant, and pistachio and most of other deciduous broad-leaved trees disappear from the landscape ([Figure 6.4c](#)). Moving still further to the south/southwest, in the Saharo-Sindian region, is the first savanna-

like vegetation referred to as ‘pseudo-savanna’ by Zohary (1973), which is characterized by the presence of widely spaced woody species belonging to *Acacia*, *Prosopis* and *Ziziphus*, which have very degraded understory vegetation ([Figure 6.4d](#)). Although the northern limit of the Saharo-Sindian region can be approximately considered as the northern limit of these three tree species, some authors consider the northern limit of the palm tree as a better boundary between the two regions (Djamali et al. 2011). Today, the palm tree can be cultivated as far north as the plain of Shiraz. The regions that make up central and southern Elam have another phytogeographical particularity in that they present a significant number of Mediterranean floristic elements – best exemplified by isolated populations of Myrtle (*Myrtus communis*) and a number of other woody and non-woody species (Akhani and Deil 2012; Migliore et al. 2012). This particularity further adds to the plant diversity of the region.



[Figure 6.4](#) Examples of different vegetation types: (a) Zagros oak woodland, (b) Oak-pistacio woodland (road from Borujen to Lordegan), (c) Almond scrubs (near Jahrom), (d) Saharo-Sindian ‘pseudo-savanna’ with *Ziziphus spina-christi* scrubs (near Lar).

As noted above, the topography of ancient Elam is varied, such that in some cases, two adjacent intermountain plains may have hundreds of meters of elevation differences. Such topographic differences have clear impacts not only on natural vegetation but also on the type of crops that can be grown. For example, the bioclimatic conditions in the Lake Parishan Basin are more in favor of olive cultivation (plain of Kazeroun: 820m), while more cold-adapted trees like walnut are better adapted to the Lake Maharlou basin (plain of Shiraz: 1450m)

(Djamali et al. 2015). The great heterogeneity in topography, bioclimate, soil type and floristic composition means that ancient Elam had significant potential as a fertile agricultural zone suitable for the cultivation of a range of different types of plants.

It is also important to note that modern populations also divide this landscape into distinctive ecological zones that each have distinctive types of vegetation: the *garmsir* or 'warm land', which are typically lowland areas that are hot in summer; the *mo'tadel* or temperate zone, which occupies the middle altitudes; the *sardir* or 'cold land', which are highland areas that have cold winters, but are suitable for growing crops; and the *sarhad* or the 'land at the upper boundary', which is typically only used for grazing (Bobek 1968: 284; Alizadeh 2006: 94–95; Roustaei et al. 2009: 18; de Planhol 2012; Potts 2016: 22–23). It has been argued that mobile pastoralist populations played a specific role in the development of political complexity in Fars and the role of the movement between these different ecological zones has been emphasised in this process (e.g. Alizadeh 1988, 2003b, 2006, 2010; Sumner 1986b, 1988b; Alden 2013). Although mobility and pastoralism across this extended zone was certain, the appropriateness of the term nomadic to describe these populations has been questioned (e.g. Potts 2008, 2014; Weeks 2010; Weeks et al. 2010; Petrie 2011, 2013b).

Natural resources, raw materials and mobility

As a whole, the Iranian Plateau hosts a diverse range of natural resources that were important for the populations of greater Western Asia (Potts 1999, 2016; Algaze 2008; Wengrow 2010; Petrie 2013a). Within the geographical bounds of Elam, the most significant of these were woods of numerous types (e.g. Potts 2016: table 2.9) and different types of stone, particularly alabaster and limestone, and bitumen deposits also occur in various locations (Potts 2016: table 2.6). In the adjacent areas of the Central Plateau, various metals were also available, including lead, silver, iron, and perhaps most importantly, copper. These metals played a key role throughout late prehistory and were obtained from outcrops in different locations, including major sources at Anarak and Veshnoveh, and other sources in Kerman (Bazin and Hubner 1969; Algaze 1993, 2005: Figure 35, 2008: 95; Pigott 1999a, 1999b; Pigott et al. 2003; Frame 2004; Weeks 2008, 2012, 2013; Thornton 2009; Petrie 2013a: 6; Helwing this volume).

Communication and interaction throughout ancient Elam was largely via paths, tracks and passes of differing length, which made use of the intermontane valleys and plains, and the narrow geological faults and passes that link them. These routes enabled people to traverse the plateau in different directions along specific corridors and make up a network of interaction and communication that was used by people moving between lowland and highland areas, into the interior of the plateau, and also within each of these zones ([Figure 6.1](#)). These routes facilitated the movement of wood, stone and metals obtained within and beyond Elam, and would have both facilitated and constrained the spread of meanings and values, and

ideas, technologies and, inevitably, people (Petrie 2013a: 7).

Detailed analyses of the topography of the southwestern Zagros between lowland Khuzestan (Susa) and the highland Kur River Basin (Anshan) have identified at least six major routes that were in common usage during the first millennium BC (Speck 2002: 16–18; 142ff.; Roustaei et al. 2009: 22). Three of these follow the same series of valleys and passes that lead from Khuzestan via Ram Hormuz, Behbahan, Dogonbadan and then into Mamasani, and it is there that they diverge and make use of different valleys and passes in order to reach the Kur River Basin (Speck 2002: 16–18, 142ff.; Roustaei et al. 2009: 22). Mamasani is also strategically located to act as a hub for routes to and from Yasuj, Kazerun, Firuzabad and Bushehr, and thus facilitates the movement and communication between the various regions that make up Elam (Roustaei et al. 2009: 23). There are additional routes from Khuzestan into the uplands to its immediate east, which provide access to Izeh and Lordegan (e.g. Wright [ed.] 1979; Zagarell 1979, 1982; Potts et al. 2009: 1). There are also various routes to the north of Khuzestan that provide access to the intermontane valleys of Luristan and the Central Western Zagros (e.g. Weiss and Young 1975; Gopnik and Rothman 2011).

Archaeological and historical conceptions of the geography of Elam

Southwest Iran was the home of the various Elamite polities and states that engaged in warfare, political intrigue and trade with Babylonia and Assyria during much of the Bronze and Iron Ages (c. 2200–500 BC), and was also the heartland of Persian Empires ruled by the Achaemenid and Sasanian Dynasties (c. 539–330 BC and c.AD 205–638, respectively; Potts 1999, 2016; Potts et al. 2009). There are also clear signs that the populations living in the lowland and highland regions that would subsequently comprise Elam were interacting with one another from the fifth and fourth millennia BC onwards (Amiet 1979; Potts 1999, 2016; Alizadeh 2010).

As Potts has noted (1999: 8, 93ff., 2016: 2–6, 79ff.), the name Elam was used somewhat imprecisely by Mesopotamian scribes from the third millennium BC onwards to describe the regions and polities immediately beyond their southeast border. Although Susa was initially regarded as the heart of ancient Elam, a combination of archaeological and epigraphic evidence has made it clear that Susa and its hinterland was but one of the major political centres in southwestern Iran, and that its importance as a major centre fluctuated through time (e.g. Amiet 1979; Vallat 1980; Potts 1999, 2016; Potts et al. 2009: 1). The highland Kur River Basin was the location of the Elamite highland capital of Anshan, which is first referred to in the third millennium BC, and continues to appear in inscriptions up to the Achaemenid period, though perhaps only as an apocryphal entity at that later date (Potts 2005; Henkelman

2011). The city of Anshan is definitively identified at Tal-e Malyan, which is situated at the northwest end of the Kur River Basin (Hansman 1972; Reiner 1973; Sumner 1988a). This urban scale settlement had major phases of occupation in the late fourth, late third and early second, and late second millennia BC, and during the intervening periods, the occupation at the site was either drastically reduced or it was entirely abandoned (Sumner 1988a, 2003; Nicholas 1990; Carter, E. 1996). The Achaemenid king Cyrus II the Great established a new capital at Pasagardae (Stronach 1978; Askari Chaverdi and Callieri 2010), but during the reign of Darius, another new capital was established at Persepolis, which is situated at the eastern end of the Kur River Basin (Schmidt 1953; Sumner 1986a; Askari Chaverdi and Callieri 2012; Askari Chaverdi et al. 2013).

It has been suggested that few of the valleys and plains in southwest Iran were large and fertile enough to support a significant sedentary population with centralised political organisation (e.g. Carter, E. 1994: 75; Miroschedji 2003: 18), though this view was almost certainly based on limited understanding of the archaeology of the regions in between the plains of Khuzestan and in the Kur River Basin, which is constantly increasing (e.g. Stein 1940; Whitcomb 1971; Nissen 1976; Dittman 1984; Wright and Carter, E. 2003; Potts and Roustaei [eds] 2006; Rezvani et al. 2007; Potts et al. 2009; Alizadeh 2014; Askari Chaverdi et al. 2014; Moghaddam 2016).

Potts (2016) has noted that Mesopotamian and Elamite sources from various periods refer to different regions that make up the core of Elamite territory. For example, third millennium BC texts refer to regions such as Sabum, Pashime, Shimashki and Zabshali (Potts 2016: 125–129, Table 5.1), while the texts of the Persepolis Fortification Archive make reference to toponyms within Persis (ancient Anshan) and Elam (Potts 2009, 2016: 320; after Hinz 1973; Sumner 1986a; Aperghis 1999; Arfa'i 1999, 2008). By and large, we do not know the location of these regions, but there are exceptions. For example, references to campaigns undertaken against Anshan by kings from the Third Dynasty of Ur mention the region of Huhnur, and characterise it as 'the key' or 'the bolt' to the land of Anshan (Hansman 1972: 117–118; Duchesne 1986; Potts 2016: 126, Table 5.1). Later texts (c. 1500 BC) from Haft Tepe refer to a 'King of Huhnuri' (Herrero and Glassner 1990: 14; Glassner 1991: 18), and Huhnur is also mentioned in lists of areas conquered by Assurbanibal during his last campaign against Elam (c. 647 BC) (Streck 1916: 50; Herzfeld 1968: 178; Potts 2005: 174, 2016: 196, 293; Petrie et al. 2005: 52; Potts 2009: 293; Potts et al. 2009: 3; Petrie 2010). Although there has been some debate about the precise find spot (e.g. Mofidi-Nasrabadi 2005; Steinkeller 2013; Alizadeh 2013), an inscription almost certainly found in Ram Hormuz indicates that this region was the location of Huhnur (Potts 2016: 116). Ram Hormuz lies strategically on the major route between Susa and Anshan, and the appellation 'key' or 'bolt' to the land of Anshan for such a location makes some sense. Further research in these interstitial regions is likely to contribute much to our comprehension of the archaeology and history of ancient Elam.

Conclusion

This relatively brief overview of the geography of ancient Elam has hopefully emphasised that the geology, landscape, climate, vegetation and human occupation of this historic entity was extremely variable. While lowland Khuzestan is geologically contiguous with the plains of lowland Mesopotamia (Potts 2016: 19), it is also geographically distinct, having its own distinct hydrology, and it is also geographically and culturally associated to the highland regions of Fars and the many intermontane valleys that lay in the intervening region. The populations of ancient Elam dominated this complex landscape for millennia, and it provided a power base sufficient for them to create sizable political confederations, states and empires that were capable of rivalling and even toppling powerful enemies such that they were able to dominate much of the ancient Near East.

References

- Adams, R.M. 1962. Agriculture and urban life in early southwestern Iran. *Science* 136/3511: 109–122.
- Akhani, H. and Deil, U. 2012. First Observations on the Flora and Vegetation of Three Islands in the NW Persian Gulf (Iran). *Phyton* 52: 73–99.
- Alden, J.R. 1979. *Regional Economic Organisation in Banesh Period Iran*, PhD. Ann Arbor: University of Michigan.
- . 2013. The Kur River Basin in the *Proto-Elamite* era – surface survey, settlement patterns, and the appearance of full-time transhumant pastoral nomadism. In: Petrie, C.A. (ed.) *Ancient Iran and Its Neighbours: Local Developments and Long-Range Interactions in the Fourth Millennium BC*, British Institute of Persian Studies Archaeological Monographs Series III. Oxford: Oxbow Books, 207–232.
- Alagze, G. 1993. *The Uruk World System – The Dynamics of Expansion of Early Mesopotamian Civilisation*, First edition. Chicago: University of Chicago Press.
- . 2005. *The Uruk World System – The Dynamics of Expansion of Early Mesopotamian Civilisation*, Second edition. Chicago: University of Chicago Press.
- . 2008. *Ancient Mesopotamia at the Dawn of Civilisation: The Evolution of an Urban Landscape*. Chicago: University of Chicago Press.
- Alizadeh, A. 1988. Socio-Economic Complexity in South Western Iran During the Fifth and Fourth Millennium B.C.: The Evidence from Tall-I Bakun A. *Iran* 26: 17–34.
- . 1992. *Prehistoric Settlement Patterns and Cultures in Susiana, Southwestern Iran: The Analysis of the F.G.L. Gremliza Survey Collection*. Museum of Anthropology Technical Reports 24. Ann Arbor: University of Michigan.
- . 2003b. *Excavations at the Prehistoric Mound of Chogha Bonut, Khuzestan, Iran: Seasons 1976/77, 1977/78 and 1996*. Oriental Institute Publications 120. Chicago: Oriental Institute of the University of Chicago.
- . 2006. *The Origins of State Organizations in Prehistoric Highland Fars, Southern Iran*. Oriental Institute Publications 128. Chicago: Oriental Institute of the University of Chicago.

- . 2010. The Rise of the Highland Elamite State in Southwestern Iran ‘Enclosed’ or Enclosing Nomadism? *Current Anthropology* 51/3: 353–383.
- . 2013. The Problem of Locating Ancient Huhnuri in the Ram Hormuz Region. *Nouvelles Assyriologiques Breves et Utilitaires* 2013/2: 37.
- . 2014. *Ancient Settlement Systems and Cultures in the Ram Hormuz Plain, Southwestern Iran: Excavations at Tall-e Geser and Regional Survey of the Ram Hormuz Area*, Oriental Institute Publications 140. Chicago: Oriental Institute of the University of Chicago.
- Alizadeh, A., Kouchoukos, N., Wilkinson, T.J., Bauer, A.M. and Mashkour, M. 2004. Human-Environment Interactions on the Upper Khuzestan Plains, Southwest Iran. Recent Investigations. *Paléorient* 30/1: 69–88.
- Amiet, P. 1979. Archaeological Discontinuity and Ethnicity Duality in Elam. *Antiquity* 53: 195–204.
- Aperghis, G. 1999. Storehouses and Systems at Persepolis. *Journal of the Economic and Social History of the Orient* XLII: 152–193.
- Arfa’i, A. 1999. La grande route Persépolis-Suse: une lecture des tablettes provenant des Fortifications de Persépolis. *Topoi* 9: 33–45.
- . 2008. *Persepolis Fortification Tablets*. Tehran: The Centre for the Great Islamic Encyclopaedia.
- Askari Chaverdi, A. and Callieri, P. 2010. Preliminary Report on the Irano-Italian Stratigraphic Study of the Toll-e Takht, Pasargad. In: Macuch, M., Weber, D. and Durkin-Meisterernst, D. (eds.) *Ancient and Middle Iranian Studies. Proceedings of the 6th European Conference of Iranian Studies*. Wiesbaden: Harrassowitz, 11–28.
- . 2012. The Activities of the Iranian-Italian Joint Archaeological Mission at Persepolis West (Fars, Iran): First Results of the Studies on the Pottery of Achaemenid and Post-Achaemenid Age. In: Basello, G.P. and Rossi, A.V. (eds.) *Dariosh Studies II. Persepolis and its Settlements. Territorial system and ideology in the Achaemenid State*. Napoli: Università di Napoli “L’Orientale e ISMEO, 225–248.
- Askari Chaverdi, A., Callieri, P. and Gondet, S. 2013. Tol-e Ajori, a New Monumental Building in Parsa: Preliminary Cross Interpretations from Recent Surveys and Excavations Works Around Persepolis (2005–2012). *ARTA* 2013–2006: 1–40.
- Askari Chaverdi, A., Potts, D.T. and Petrie, C.A. 2014. *Achaemenid and Post Achaemenid Studies, Mamsani Region, Northwest and western Fars, Iran*. Shiraz, Shiraz University of Arts Press (In Persian).
- Azizi Kharanaghi, H., Fazeli Nashli, H. and Nishiaki, Y. 2013. Tepe Rahmatabad: A Pre-Pottery and Pottery Neolithic Site in Fars Province. In: Matthews, R. and Fazeli-Nashli, H. (eds.) *The Neolithisation of Iran: The Formation of New Societies*. Oxford: BANEA and Oxbow, 108–123.
- Baeteman, C., Dupin, L. and Heyvaert, V.M.A. 2004. The Persian Gulf Shorelines and the Karkheh, Karun, and Jarrahi Rivers: A Geo-Archaeological Approach: First Progress Report. 1. Geo-Environmental Investigation. *Akkadica* 125: 155–215.
- Bazin, D. and Hübner, H. 1969. *Copper Deposits in Iran: Geological Survey of Iran*. Report 13. Tehran: Geological Survey of Iran.
- Berberian, M., Petrie, C.A., Potts, D.T., Asgari Chaverdi, A., Disting, A., Ghāssemi, P., Noruzi, R., Sardari Zarchi, A. and Weeks, L. 2014. Archaeoseismicity of the Mounds and Monuments Along the Kāzerun Fault (western Zagros, SW Iranian Plateau) Since the Chalcolithic Period. *Iranica Antiqua* 49: 1–81.
- Bobek, H. 1968. Vegetation. In: Fisher, W.B. (ed.) *The Cambridge History of Iran, Volume 1: The Land of Iran*. Cambridge:

Cambridge University Press, 280–293.

- Boucharlat, R. 2009. Susa iii. The Achaemenid Period. *Encyclopædia Iranica*, online edition, available at www.iranicaonline.org/articles/susa-iii-the-achaemenid-period (accessed 20 December 2016).
- Brookes, I.A. 1982. Geomorphological evidence for climatic change in Iran during the last 20,000 years. In: Bintliff, J.L. and Van Zeist, W. (eds.) *Palaeoclimates, Palaeoenvironments and Human Communities in the Eastern Mediterranean Region in Later Prehistory*, 133(i and ii). Oxford: BAR International Series, 191–229.
- . 1989. *The Physical Geography, Geomorphology and Late Quaternary History of the Mahidasht Project Area, Qara Su Basin Central West Iran*. ROM Mahidasht Project 1. Toronto: Royal Ontario Museum.
- Carter, E. 1994. Bridging the Gap Between the Elamites and the Persians in Southeastern Khuzistan. In: Sancisi-Weedenburg, H., Kuhrt, A. and Cool-Root, M. (eds.) *Achaemenid History VIII: – Continuity and Change*. Leiden: Nederlands Instituut voor Het nabije Oosten, 55–95.
- . 1996. *Excavations at Anshan (Tal-e Malyan): The Middle Elamite Period*. Malyan Excavation Reports, University Museum Monographs 82. Philadelphia: University Museum.
- Carter, E. and Stolper, M.W. 1984. *Elam: Surveys of Political History and Archaeology*. Berkeley: University of California Press.
- Carter R.A., Challis, K., Priestman, S.M.N. and Tofighian, H. 2006. The Bushehr Hinterland: Results of the First Season of the Iranian-British Archaeological Survey of Bushehr Province, November–December 2004. *Iran* 44: 63–103.
- Dittmann, R. 1984. *Eine Randebene des Zagros in der Frühzeit: Ergebnisse des Behbahan-Zuhreh Surveys*. Berliner Beiträge zum Vorderen Orient Band 3. Berlin: Dietrich Riemer Verlag.
- Djamali, M., Akhiani, H., Khoshravesh, R., Andrieu-Ponel, V., Ponel, P. and Brewer, S. 2011. Application of the Global Bioclimatic Classification to Iran: Implications for Understanding the Modern Vegetation and Biogeography. *Ecologia Mediterranea* 37: 91–114.
- Djamali, M., Brewer, S., Breckle, S. and Jackson, S.T. 2012. Climatic Determinism in Phytogeographic Regionalization: A Test From the Irano-Turanian Region, SW and Central Asia. *Flora* 207: 237–249.
- Djamali M., Jones M.D., Migliore, J. et al. 2015. Olive Cultivation in the Heart of the Persian Achaemenid Empire: New Insights to Agricultural Practices and Environmental Changes Reflected in a Late Holocene Pollen Record From Lake Parishan, SW Iran. *Vegetation History and Archaeobotany* 25: 255–269.
- Domroes, M., Kaviani, M. and Schaefer, D. 1998. An analysis of regional and intra-annual precipitation variability over Iran using Multivariate Statistical Methods. *Theoretical and Applied Climatology* 61: 151–159.
- Duchesne, J. 1986. La localisation de Huhnur. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta Historiae Elamicae: Mélanges offerts à M.-J. Steve*. Paris: Editions Recherche sur les Civilisations, 65–74.
- El-Moslimany, A.P., 1986. Ecology and late-Quaternary history of the Kurdo-Zagrosian oak forest near Lake Zeribar, western Iran. *Vegetatio* 68: 55–63.
- Fisher, W.B. 1968. Physical geography. In: Fisher, W.B. (Ed.) *The Cambridge History of Iran, Volume 1: The Land of Iran*. Cambridge: Cambridge University Press, 3–110.
- Frame, L.D. 2004. *Investigations at Tal-i Iblis: Evidence for Copper Smelting During the Chalcolithic Period*, unpublished B.Sc. Diss., Dept. of Materials Science and Engineering. Cambridge, MA: Massachusetts Institute of Technology.

- Ganji, M.H. 1968. Climate. In: Fisher, W.B. (Ed.) *The Cambridge History of Iran, Volume 1: The Land of Iran*. Cambridge: Cambridge University Press, 212–249.
- Glassner, J.-J. 1991. Les textes de Haft Tépé, la Susiane et l'Elam au 2ème millénaire. In: De Meyer, L. and Gasche, H. (eds.) *Mésopotamie et Elam*, Ghent: Mesopotamian History and Environment Occasional Publications 1, 109–126.
- Gopnik, H. and Rothman, M. (eds.) 2011. *On the High Road: The History of Godin Tepe, Iran*. Toronto: Royal Ontario Museum/Mazda Press.
- Gropp, G. 2005. Susa v. The Sasanian Period, *Encyclopædia Iranica*, available online at www.iranicaonline.org/articles/susa-v (accessed 20 December 2016).
- Hansman, J. 1972. Elamites, Achaemenians and Anshan. *Iran* 10: 101–124.
- Harrison, J.V. 1968. Geology. In: Fisher, W.B. (Ed.) *The Cambridge History of Iran, Volume 1: The Land of Iran*. Cambridge: Cambridge University Press, 111–185.
- Henkelman, W. 2011. Cyrus the Persian and Darius the Elamite: A Case of Mistaken Identity. In: Rollinger, R., Truschnegg, B. and Bichler, R. (eds.) *Herot und das Persische Weltreich/Herodotus and the Persian Empire*. Wiesbaden: Classica et Orientalia 3, 577–634.
- Herrero, P. and Glassner, J.-J. 1990. Haft Tépé: Choix de textes I. *Iranica Antiqua* 25: 1–45.
- Herzfeld, E.E. 1968. *The Persian Empire: Studies in Geography and Ethnography of the Ancient Near East*. Wiesbaden: Franz Steiner.
- Heyvaert, V.M.A. 2007. *Fluvial Sedimentation, Sea-Level History and Anthropogenic Impact in the Great Mesopotamian Plain: A New Holocene Record*, unpublished PhD thesis. Brussels: Vrije Universiteit Brussel.
- Heyvaert, V.M.A. and Baeteman, C. 2007. Holocene Sedimentary Evolution and Palaeocoastlines of the Lower Khuzestan Plain (southwest Iran). *Marine Geology* 224: 83–108.
- Hinz, W. 1973. *Neue Wege im Altpersischen*. Wiesbaden: Göttinger Orintforschungen III/I.
- Hole, F. (ed.) 1987. *The Archaeology of Western Iran: Settlement and Society from Prehistory to the Islamic Conquest*. Washington, DC: Smithsonian Series in Archaeological Inquiry, Smithsonian Institution Press.
- Hole, F., Flannery, K.V. and Neely, J.A. 1969. *Prehistory and Human Ecology of the Deh Luran Plain: An Early Village Sequence from Khuzistan, Iran*. Memoirs of the Museum of Anthropology, University of Michigan, 1, Museum of Anthropology. Ann Arbor: University of Michigan.
- Johnson, G.A. 1973. *Local Exchange and Early State Development in Southwestern Iran*, Archaeological Papers, 51, Museum of Anthropology. Ann Arbor: University of Michigan.
- Jones, M.D. 2013. Key Questions Regarding the Palaeoenvironment of Iran. In: Potts, D. (ed.) *The Oxford Handbook of Ancient Iran*. New York: Oxford University Press, 17–28.
- Jones, M.D., Djamali, M., Holmes, J., Weeks, L., Leng, M.J., Lashkari, A., Alamdari, K., Noorollahi, D., Thomas, L. and Metcalfe, S.E. 2015. Human Impact on the Hydroenvironment of Lake Parishan, SW Iran, Through the Late Holocene. *The Holocene* 25: 1651–1661.
- Jones, M.D., Djamali, M., Stevens, L., Heyvaert, V., Askari, H., Norolahie, D. and Weeks, L. 2013. Mid Holocene Environmental and Climatic Change in Iran. In: Petrie, C.A. (ed.) *Ancient Iran and Its Neighbours: Local Developments and Long-Range Interactions in the 4th Millennium BC*. Oxford: British Institute for Persian Studies and Oxbow Books, 25–34.

- Kuzucuoğlu, C., Dorfler, W., Kunesch, S. and Goupille, F. 2011. Mid- to Late-Holocene Climate Change in Central Turkey: The Tecer Lake Record. *The Holocene* 21: 173–188.
- Martinez-Sève, L. 2015. Susa iv. The Hellenistic and Parthian Periods. *Encyclopædia Iranica*, available online at www.iranicaonline.org/articles/susa-iv-hellenistic-parthian-periods, (accessed 20 November 2016).
- Migliore, J., Baumel, A., Juin, M. and Médail, F. 2012. From Mediterranean Shores to Central Saharan Mountains: Key Phylogeographical Insights from the Genus *Myrtus*. *Journal of Biogeography* 39: 942–956.
- Miroschedji, P. de. 1981. Prospections archéologiques au Khuzistan en 1977. *Cahiers de la Délégation archéologique française en Iran* 12: 169–192.
- . 2003. Susa and the Highlands: Major Trends in the History of Elamite Civilisation. In Miller, N.F. and Abdi, K. (eds.) *Yeki bud, yeki nabud: Essays on the Archaeology of Iran in Honor of William M. Sumner*, 48. Los Angeles: Cotsen Institute of Archaeology, 17–38.
- Modarres, R. and Sarhadi, A. 2011. Statistically-Based Regionalization of Rainfall Climates of Iran. *Global and Planetary Change* 75: 67–75.
- Mofidi-Nasrabadi, B.M. 2005. Eine Steininschrift des Amar-Suena aus Tappeh Bormi (Iran). *Zeitschrift für Assyriologie* 95: 161–171.
- Moghaddam, A. 2016. A fifth-millennium BC cemetery in the north Persian Gulf: the Zohreh Prehistoric Project, *Antiquity Project Gallery*, available online at: <https://antiquity.ac.uk/projgall/moghaddam353> (accessed 20 December 2016).
- Nicholas, I.M. 1990. *The Proto-Elamite Settlement at TUV*. Malyan Excavation Reports, III. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.
- Nissen, H.J. 1976. The Behbahan Plain in the 5th Millennium B.C. In: Kiani, M.Y. (ed.) *The Memorial Volume of the VIth International Congress of Iranian Art and Archaeology: Oxford September 11–16th 1972*. Tehran: Iranian Centre for Archaeological Research, 273–279.
- Oberlander, T.M. 1968. The Origin of the Zagros Defiles. In: Fisher, W.B. (ed.) *The Cambridge History of Iran, Volume 1: The Land of Iran*. Cambridge: Cambridge University Press, 195–211.
- Petrie, C.A. 2010. Kaftari Ware. *Encyclopaedia Iranica* XV/4: 344–348, available online at: www.iranica.com/articles/kaftari-ware (accessed 20 December 2016).
- . 2011. ‘Culture’, innovation and interaction across southern Iran from the Neolithic to the Bronze Age (6500–3000 BC). In: Roberts, B. and Vander Linden, M. (eds.) *Investigating Archaeological Cultures: Material Culture, Variability and Transmission*. New York: Springer, 151–182.
- . 2013a. Ancient Iran and Its Neighbours: state of play. In: Petrie, C.A. (ed.) *Ancient Iran and Its Neighbours: Local Developments and Long-Range Interactions in the Fourth Millennium BC*, British Institute of Persian Studies Archaeological Monographs Series III. Oxford: Oxbow Books, 1–24.
- . 2013b. Ancient Iran and Its Neighbours: Emerging Paradigms and Future Directions. In: Petrie, C.A. (ed.) *Ancient Iran and Its Neighbours: Local Developments and Long-Range Interactions in the Fourth Millennium BC*, British Institute of Persian Studies Archaeological Monographs Series III. Oxford: Oxbow Books, 385–410.
- Petrie, C.A., Asgari Chaverdi, A. and Seyedin, M. 2005. From Anshan to Dilmun and Magan: the Spatial and Temporal Distribution of Kaftari and Kaftari-Related Ceramic Vessels. *Iran* 43: 49–86.

- . 2009. Excavations at Tol-e Spid. In: Potts, D.T., Roustaei K., Petrie, C.A. and Weeks, L.R. (eds.) *The Mamasani Archaeological Project Stage One: A Report on the First Two Seasons of the ICAR – University of Sydney Joint Expedition to the Mamasani District, Fars Province, Iran*. Oxford: Archaeopress, BAR International Series 2044, 89–134.
- Pigott, V.C. 1999a. The development of metal production on the Iranian Plateau: an archaeometallurgical perspective. In: Pigott, V.C. (ed.) *The Archaeometallurgy of the Asian Old World*, University Museum monograph 89, University Museum symposium series vol. 7, MASCA research papers in science and archaeology vol. 16, University Museum. Philadelphia: University of Pennsylvania, 73–106.
- . 1999b. A heartland of metallurgy: Neolithic/Chalcolithic metallurgical origins on the Iranian Plateau. In: Hauptmann, A., Pernicka, E., Rehren, T. and Yalçın, Ü. (eds.) *The Beginnings of Metallurgy*, Der Anschnitt Beiheft 9. Bochum: Deutsches Bergbau-Museum, 107–120.
- Pigott, V.C., Rogers, H.C. and Nash, S.K. 2003. Archaeometallurgical Investigations at Malyan: The Evidence for Tin-Bronze in the Kaftari Phase. In: Miller, N.F. and Abdi, K. (eds.) *Yeki Bud, Yeki Nabud. Essays on the Archaeology Iran in Honor of William M. Sumner*, Cotsen Institute of Archaeology Monograph No. 48. Los Angeles: Cotsen Institute of Archaeology, 161–176.
- de Planhol, X. 2012. Garmsir and sardsir. *Encyclopedia Iranica* X/3: 316–317, available online at: www.iranicaonline.org/articles/garmsir-and-sardsir (accessed 20 December 2016).
- Potts, D.T. 1999. *The Archaeology of Elam: Formation and Transformation of an Ancient Iranian State*, first edition, Cambridge World Archaeology. Cambridge: Cambridge University Press.
- . 2005. Cyrus the Great and the Kingdom of Anshan. In: Curtis, V.S. and Stewart, S. (eds.) *Birth of the Persian Empire*. London: I.B. Tauris, 1–21.
- . 2008. Review of Alizadeh, A. 2006. *The Origins of State Organizations in Prehistoric Highland Fars, Southern Iran*, Oriental Institute Publications 128, Chicago. *Bibliotheca Orientalis* 65/1–2: 196–206.
- . 2009. The Persepolis Fortification Texts (PFTs) and the Royal Road: Another Look at the Fahliyan area. In: Briant, P., Henkelman, W.F.M. and Stolper, M.W. (eds.) *L'archive des Fortifications de Persépolis. État des questions et perspectives de recherches*, Paris: Persika 12, 275–300.
- . 2014. *Nomadism in Iran: From Antiquity to the Modern Era*. New York: Oxford University Press.
- . 2016. *The Archaeology of Elam: Formation and Transformation of an Ancient Iranian State*, 2nd ed. Cambridge World Archaeology, Cambridge: Cambridge University Press.
- Potts, D.T. and Roustaei, K. (ed.) 2006. *The Mamasani Archaeological Project Stage One: A report on the first two seasons of the ICAR-University of Sydney Expedition to the Mamasani District, Fars Province, Iran*. Tehran: Iranian Center for Archaeological Research.
- Potts, D.T., Roustaei K., Petrie, C.A. and Weeks, L.R. (eds.) 2009. *The Mamasani Archaeological Project Stage One: A report on the first two seasons of the ICAR – University of Sydney Joint Expedition to the Mamasani District, Fars Province, Iran*. Oxford: Archaeopress, BAR International Series 2044.
- Potts, D.T., Roustaei, K., Weeks, L.R. and Petrie, C.A. 2009. The Mamasani District and the Archaeology of Southwestern Iran. In: Potts, D.T., Roustaei K., Petrie, C.A. and Weeks, L.R. (eds.) *The Mamasani Archaeological Project Stage One: A Report on the First Two Seasons of the ICAR – University of Sydney Joint Expedition to the Mamasani District, Fars Province*,

- Iran. Oxford: Archaeopress, BAR International Series 2044, 1–16.
- Pourasghar, F., Tozuka, T., Jahanbakhsh, S., Sarraf, B.S., Ghaemi, H. and Yamagata, T. 2012. The Interannual Precipitation Variability in the Southern Part of Iran as Linked to Large-Scale Climate Modes. *Climate Dynamics* 39: 2329–2341.
- Reiner, E. 1973. The Location of Anšan. *Revue d'Assyriologie et d'Archéologie Orientale* 67/1: 57–62.
- Rezvani, H., Roustaei, K., Azadi, A. and Ghezelbash, E. 2007. *Final Report of the Archaeological Excavations at Lama Cemetery: Yasudj-Kohgilouye Va Boyer Ahmad*. Archaeological Report Monography Series 12. Tehran: ICAR (In Persian).
- Roustaei, K., Alamdari, K. and Petrie, C.A. 2006. Landscape and Environment in the Mamasani District. In: Potts, D.T. and Roustaei K. (eds.) *The Mamasani Archaeological Project Stage One: A report on the first two seasons of the ICAR – University of Sydney Joint Expedition to the Mamasani District, Fars Province, Iran*. Tehran: Iranian Center for Archaeological Research, 17–30.
- Roustaei, K., Alamdari, K. and Petrie, C.A. 2009. Landscape and Environment in the Mamasani District. In: Potts, D.T., Roustaei K., Petrie, C.A. and Weeks, L.R. (eds.) *The Mamasani Archaeological Project Stage One: A report on the first two seasons of the ICAR – University of Sydney Joint Expedition to the Mamasani District, Fars Province, Iran*. Oxford: Archaeopress, BAR International Series 2044, 17–30.
- Sagheb Talebi, K., Sajedi, T. and Pourkhorsandi, M. 2014. *Forests of Iran: A Treasure from the Past, a Hope for the Future*. Dordrecht: Springer.
- Schmidt, E.F. 1953. *Persepolis I*, Oriental Institute Publications 68. Chicago: Oriental Institute of the University of Chicago.
- Sharifi, A., Pourmand, A., Canuel, E.A., Ferer-Tyler, E., Peterson, L.C., Aichner, B., Feakins, S.J., Daryaei, T., Djamali, M., Beni, A.N. and Lahijani, H.A. 2015. Abrupt Climate Variability Since the Last Deglaciation Based on a High-Resolution, Multi-Proxy Peat Record from NW Iran: The Hand That Rocked the Cradle of Civilization? *Quaternary Science Reviews* 123: 215–230.
- Speck, H. 2002. Alexander at the Persian Gates: A Study in Historiography and Topography. *American Journal of Ancient History* N.S. 1: 1–233.
- Staubwasser, M. and Weiss, H. 2006. Holocene Climate and Cultural Evolution in Late Prehistoric-Early Historic West Asia – Introduction. *Quaternary Research* 66/3: 372–387.
- Stein, M.A. 1940. *Old Routes of Western Iran*. London: Macmillan and Sons.
- Steinkeller, P. 2013. Puzur-Inšušinak at Susa: A Pivotal Episode of Early Elamite History Reconsidered. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam: Archaeological, Philological, Historical and Geographical Perspectives*, Proceedings of the International Congress held at Ghent University, December 14–17. Leiden and Boston: Brill, 293–318.
- Stevens, L.R., Ito, E., Schwalb, A. and Wright, H.E. 2006. Timing of Atmospheric Precipitation in the Zagros Mountains Inferred from a Multi-Proxy Record from Lake Mirabad, Iran. *Quaternary Research* 66: 494–500.
- Stevens, L.R., Wright, H.E. and Ito, E. 2001. Proposed Changes in Seasonality of Climate During the Lateglacial and Holocene at Lake Zeribar, Iran. *The Holocene* 11/6: 747–755.
- Stöcklin, J. and Navabi, M.H. 1973. *Tectonic Map of Iran*. Tehran: Iran Geological Survey.
- Streck, M. 1916. *Assurbanipal und die letzten assyrischen Könige bis zum untergange Niniveh's*. Leipzig: J.C. Hinrichs'sche Buchhandlung.
- Stronach, D. 1978. *Pasargadae: A Report on the Excavations Conducted by the British Institute of Persian Studies from 1961*

to 1963. Oxford: Clarendon Press.

- Sumner, W.M. 1972. *Cultural Development in the Kur River Basin, Iran: An Archaeological Analysis of Settlement Patterns*, PhD. Pennsylvania: University of Pennsylvania.
- . 1986a. Achaemenid Settlement in the Persepolis Plain. *American Journal of Archaeology* 90: 3–31.
- . 1986b. Proto-Elamite Civilisation in Fars. In: Finkbeiner, U. and Rollig, W. (eds.) *Gamdat Nasr: Period of Regional Style?* Beihefte zum Tubinger Atlas des Vorderen Orients, 62. Wiesbaden: Ludwig Reichert, 199–211.
- . 1988a. Maljan, Tall-e (Anšan). *Reallexikon der Assyriologie* 7: 306–320.
- . 1988b. Prelude to Proto-Elamite Anshan: The Lapui Phase. *Iranica Antiqua* 23: 23–44.
- . 1990a. An Archaeological Estimate of Population Trends Since 6000 BC in the Kur River Basin, Fars Province, Iran. In: Taddei, M. (ed.) *South Asian Archaeology 1987*. Rome: Istituto Italiano per il Medio ed Estremo Oriente, 3–16.
- . 1990b. Full-Coverage Regional Archaeological Survey in the Near East: An Example from Iran. In: Fish, S.K. and Kowalewski, S.A. (eds.) *The Archaeology of Regions: A Case for Full-Coverage Survey*, Smithsonian Series in Archaeological Inquiry. Washington, DC: Smithsonian Institution Press, 87–115.
- . 2003. *Early Urban Life in the Land of Anshan: Excavations at Tal-e Malyan in the Highlands of Iran*. Malyan Excavations Reports III, University Museum Monograph, 113. Pennsylvania: University of Pennsylvania Museum of Archaeology and Anthropology.
- Taylor, H. 2016. *Cultural Integration in Intermontane Zones: Cultural Variability and the Socio-Economics of Ceramic Production in Highland Southwest Iran During the Fifth Millennium BC*, Unpublished PhD thesis. Cambridge: University of Cambridge.
- Thornton, C.P. 2009. *The Chalcolithic and Early Bronze Age Metallurgy of Tepe Hissar, Northeast Iran: A Challenge to the “Levantine Paradigm”*, unpublished PhD Diss., Department of Anthropology. Pennsylvania: University of Pennsylvania.
- Vallat, F. 1980. *Suse et l’Elam. Études Elamites*. Paris: Éditions ADPF.
- . 1998. Elam i. The History of Elam. *Encyclopaedia Iranica* VIII/3: 301–313, available online at www.iranicaonline.org/articles/elam-i (accessed 20 December 2016).
- . 2008. Susa ii. History during the Elamite period, *Encyclopaedia Iranica*, available online at www.iranicaonline.org/articles/susa-ii-history-during-the-elamite-period (accessed 20 December 2016).
- Walstra, J., Heyvaert, V.M.A. and Verkinderen, P. 2010. Assessing Human Impact on Fan Development Using Satellite Images: A Case-Study from Lower Khuzestan (SW Iran). *Geodinamica Acta* 23: 267–285.
- . 2011. Mapping the alluvial landscapes of Lower Khuzestan (SW Iran). In: Smith, M.J., Paron, P. and Griffith, J.S. (eds.) *Geomorphological Mapping: A Professional Handbook of Techniques and Applications*. Amsterdam: Elsevier, 551–575.
- Weeks, L.R. 2008. The 2007 Early Iranian Metallurgy Workshop at the University of Nottingham. *Iran* 46: 335–345.
- . 2010. Review of Abbas Alizadeh, *Chogha Mish, Volume 2: The Development of a Prehistoric Regional Center in Lowland Susiana, Southwestern Iran. Final Report on the Last Six Seasons of Excavations, 1972–1978*, Oriental Institute Publications 130. Chicago. *Archäologische Mitteilungen aus Iran* 42: 309–313.
- . 2012. Metallurgy. In: Potts, D.T. (ed.) *A Companion to the Archaeology of the Ancient Near East*. Oxford: Wiley-Blackwells, 295–316.
- . 2013. The development and expansion of a Neolithic way of life. In: Potts, D.T. (ed.) *Oxford Handbook of Iranian*

Archaeology. Oxford: Oxford University Press, 49–75.

- Weeks, L.R., Petrie, C.A. and Potts, D.T. 2010. 'Ubaid-related-related? The 'black-on-buff' ceramic traditions of highland southwest Iran. In: Carter, R.A. and Philip, G. (eds.) *Beyond the 'Ubaid, Transformation and Integration in the Late Prehistoric Societies of the Middle East*, Studies in Ancient Oriental Civilization Series. Chicago: Oriental Institute of the University of Chicago, 247–278.
- Weiss, H. and Young, T.C. 1975. The Merchants of Susa Godin V and Plateau-Lowland Relations in the Late Fourth Millennium B.C. *Iran* 13: 1–17.
- Wengrow, D. 2010. *What Makes Civilization?* Oxford: Oxford University Press.
- Wenke, R.J. 1975–1976. Imperial Investments and agricultural developments in Parthian and Sasanian Khuzestan; 150 B.C. to A.D. 640. *Mesopotamia* X–XI: 31–221.
- Whitcomb, D.S. 1971. *The Proto-Elamite Period at Tall-i Ghazir, Iran*, B.A. Georgia: Emory University, Athens.
- White, F. and Léonard, J. 1991. Phytogeographic Links Between Africa and Southwest Asia. *Flora et Vegetatio Mundi* 9: 229–246.
- Wright, H.T. (ed.) 1979. *Archaeological Investigations in Northeastern Xuzestan, 1976*, Museum of Anthropology Technical Reports, 10, Museum of Anthropology, University of Michigan. Ann Arbor: University of Michigan.
- Wright, H.T. and Carter, E. 2003. Archaeological survey on the western Ram Hormuz plain. In Miller, N.F. and Abdi, K. (eds.) *Yeki bud, yeki nabud: Essays on the Archaeology of Iran in Honor of William M. Sumner*. Los Angeles: Cotsen Institute of Archaeology, 61–82.
- Zagarell, A. 1979. The Mountain Zone of South-West Iran – Meeting Point of Lowland and the Central Plateau in the Late Prehistoric Period. In: *Akten des VII. Internationalen Kongresses für Iranische Kunst und Archäologie*. Berlin: Dietrich Reimer, 56–63.
- . 1982. *The Prehistory of the Northeast Bahtiyari Mountains, Iran: The Rise of a Highland Way of Life*. Beihefte zum Tübinger Atlas des Vorderen Orients, 42. Wiesbaden: Dr. Ludwig Reichert Verlag.
- Zohary, M. 1973. *Geobotanical Foundations of the Middle East*. vol. 2. Stuttgart: Fischer.

CHAPTER SEVEN

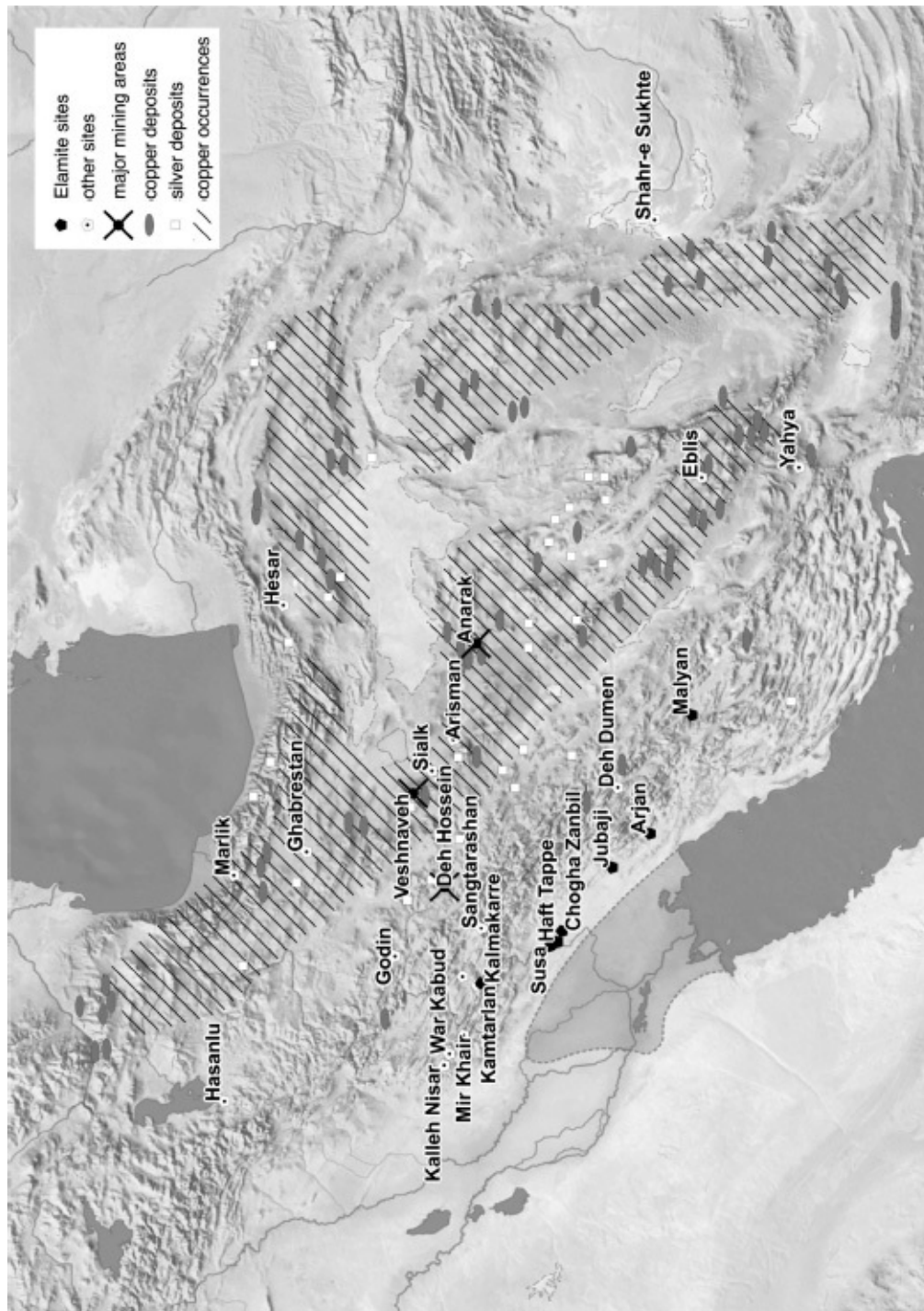
Metals and mining



Barbara Helwing

Introduction

The Iranian highlands are known for their rich metal resources which have supplied crucial raw materials to emerging states in Western Asia since ancient times ([Figure 7.1](#)). In the organisation of this supply system, the dichotomy between highlands and lowlands that is so significant in Elamite history (Amiet 1986) plays out: for a long time, lowland communities relied on materials travelling to them from the highland sources. A second potential supplier would have been the distant coasts of Oman, where copper was mined and shipped via the Persian Gulf to Mesopotamia and also to the coastal harbours of Khuzestan (Hauptmann et al. 1988; Prange et al. 1999). To reconstruct a metal supply system for Elam over time, we must combine evidence for the various steps of the metallurgical cycle from the mining of ores to the final product and its distribution. We must keep in mind that this evidence and its study are heterogeneous and patchy. On the supply side, some detailed research into specific source areas exists, but the coverage is uneven. A similar imbalance applies to the consumer side: a systematic archaeological and metallurgical analysis of thousands of objects from the Louvre partition of the Susa assemblage provides a fundamental overview for the older periods (Tallon 1987; Malfoy and Menu 1987), while assemblages from major highland sites remain little or understudied. With regard to workshops, direct observation is rarely possible and we rely on residue distribution and indirect data, including texts. A last note of caution is necessary with respect to the archaeological record in Elam, which is characterised by a series of well-documented periods alternating with centuries of limited documentation. These latter periods are largely products of the state of archaeological research and not real-life gaps. This introduction to metal production and use in the wider lands of Elam begins with a broad view over Iran as a supply country that was fully integrated into a long-distance contact network in the proto-Elamite period; subsequently, the perspective will narrow and focus more specifically on the regions that define the ancient entity of Elam, high and low.



[Figure 7.1 Map of Iran, showing known copper and silver deposits \(data after Momenzadeh 2004b\), and the archaeological sites discussed in the text.](#)

Research and resources

Iran as the now-proverbial “heartland of metallurgy” (Pigott 1999) has seen some targeted research on early metallurgy. Geological and mining archaeological exploration was pioneered in the 1960s by the Wertheim Pyrotechnological Expedition linked to the Tal-e Eblis

excavations running at the same time in Kerman province (Wertime 1967; Arab and Rehren 2004). Geological field prospections were also conducted by a French Mission in Iran and Afghanistan in the 1970s (Berthoud et al. 1976; Berthoud et al. 1982), and other smaller explorations followed until this work came to a halt in 1979. A new field project initiated in 2000 has addressed the metallurgical systems of western Central Iran from geology to the final product (Vatandoust et al. 2011).

From the perspective of artefact analysis, the exhaustive study of the Susa metal objects hosted in the Louvre remains a major point of reference (Tallon 1987; Malfoy and Menu 1987); while analytical protocol has advanced much since, the archaeological evaluation of the material remains unsurpassed. To this important body that comprises the beginnings of metalworking until the end of the 3rd millennium BCE can be added smaller studies on Elamite metal sculptures from Susa (Tallon, Hurtel, and Drilhon 1989). Studies dealing with sites in the wider Elamite world largely relied on samples collected during excavations in the 1960s and 1970s, some of which were recently (re-)studied (Thornton et al. 2002; Thornton et al. 2005; Frame 2004; 2009; 2010; Thornton 2009). Of these, only Tal-e Malyan (Pigott, Rogers, and Nash 2003a; 2003b) falls strictly within the lands of Elam; nevertheless, Godin Tappe, Tappe Yahya, Tal-e Eblis, Tappe Hesar and Shahdad are important points of reference. In recent years, analyses of objects excavated by Louis Vanden Berghe in Lorestan have provided important insights for archaeometallurgy (Fleming et al. 2005; Fleming et al. 2006); this body is currently being enlarged through new sampling programs begun in Iran (Nezafati, Pernicka, and Momenzadeh 2009; Oudbashi and Emami 2010; Rafiei Alavi 2012; Oudbashi et al. 2013; Oudbashi and Davami 2014; Oudbashi and Hasanpour 2016).

A last major source for understanding metal use in the Elamite world are texts; most important of these are the Middle Elamite archives from Tal-e Malyan (Stolper 1984) and from Haft Tappe (Herrero 1991; Herrero and Glassner 1990) that document the distribution of quantities of metals to specific workshops and the commissioning of metal works.

Raw materials

Sources of metal

The highlands of Iran form part of the Tethyan Eurasian Metallogenic Belt (TEMB) that runs from the Balkans to Central Asia. It was formed through orogenic movements, that is, by tectonics and magmatic events, going back at least one billion years, resulting in different types of mineralisations. The orogenesis of the TEMB proceeded through several distinct phases, each leaving specific geological formations. Different host-rocks hence contain mineralisations of copper, iron, silver and lead ores, and gold. These major metals can occur together with other metals and non-metallic elements like arsenic, tin, nickel, antimony and

some others in polymetallic deposits. These associations may have led to the unintentional production of natural alloys in the beginning, but systematic alloying practice is also attested since the 4th millennium BCE. From the point of view of pre-industrial metal exploitation (Momenzadeh 2004a), only some ore mineralisations were attractive, while others were not exploited when metal concentrations per ton of ore would have been too low or the depth of the deposit too deep to be accessed in antiquity.

While highland Iran is rich in metal deposits, this is not true for the lands of Elam: the coastal plain of Khuzestan naturally lacks metal, and the Alpidic formation of the Zagros Mountains does not host copper or other metal ore deposits. Elam would thus have relied on supplies from the neighbouring highland zones or from overseas. There were copper deposits in the Sanandaj-Sirjan area and close to the town of Arak that seem to have provided copper to Lorestan, if not beyond.

Copper

Copper is the earliest used major base metal, and it remains dominant until the 8th century BCE when it became successively replaced by iron. Sources for copper are concentrated in the tertiary porphyry zones of highland Iran (following Momenzadeh 2004a): the Orumiyeh-Dokhtar volcanic belt in south-central and north-central Iran, along the southern foothills of the Alborz and in eastern Iran, is the most important of these deposits, and early exploitation is attested in numerous zones. Ores occur in two major forms: (1) in host-rocks of andesite and basalt formed during eocene submarine volcanism, occur mineralisations of chalcosite, copper oxides and some metallic copper, mainly in the form of veins. The metal content in these veins is high, but the size of the deposits is limited; such deposits would have been attractive in ancient times but are not suitable for modern economic exploitation. (2) porphyry and skarn deposits formed during late tertiary hydrothermal events host mineralisations and vein deposits of copper, gold and silver.

Of importance are also polymetallic mineralisations of copper, tin, tungsten and gold, as they have been discovered in Deh Hossein in the Sanandaj-Sirjan belt in the Arak area. This deposit formed by cretaceous plutono-metamorphic events, and similar mineralisations exist also in central Iran, near Birjand and in northeastern Khorassan. However, these have not yet been investigated for traces of ancient mining.

Ancient copper mining

Traces of ancient copper mining often fall victim to modern mining activities, and modern prospectors rely often on traces of ancient mining in their field surveys. What is known today of ancient mining is thus certainly not representative for ancient mining activities but can

nevertheless give us an indication of the technologies used. Two major factors determine these technologies: the type of deposit, and the technology known by the ancient miners.

Early mining (Stöllner 2014) first proceeded by open cast mining, that is, by digging up ores from the ground in open pits. Open cast mining would be efficient in deposits that are close to the surface; therefore the technology alone is not a chronological indicator. Open cast pits are in some places still visible in the landscape, for example, at the Deh Hossein polymetallic deposit in northern Lorestan (Nezafati, Pernicka, and Momenzadeh 2006).

The mining of vein deposits is mainly carried out by digging underground shafts and galleries that follow the veins. To break the rock, the miners used a technique called “fire setting”: the rock is first heated through a fire lit underneath and then is rapidly cooled by pouring cold water over it (Weisgerber and Willies 2000). This procedure cracks the rock and leaves characteristic concave traces on the remaining rock. Fire setting was used from at least the 3rd millennium BCE to access underground veins.

Miners furthermore used an array of tools to crack the rock: hammers and mallets of hard stones like andesites or basalts were used in great quantities. Discarded mining tools in gravels descending from slopes are a good indicator of ancient mining. Stone tools like mortars or grinding stones are also used for the further beneficiation of the ores.

Further processing of the ores took place in workshops, which were often located at a distance from the mines and were probably chosen for a number of reasons, most importantly the availability of fuel. With the appearance of domesticated donkeys as pack animals in the 4th millennium BCE (Helwing 2011; Potts 2011), bulk transport over greater distances became possible. Together with other crucial innovations appearing in the proto-Elamite period, new transport technology may have contributed to the apparent boom in the early metal industry in the Iranian highlands.

The best-known copper and silver deposit in the Iranian highlands is the Anarak – Talmessi zone of central Iran (Berthoud et al. 1976; Pernicka et al. 2011). Attempts to link this deposit with textual references to the copper mountains of Kimash (Lafont 1996) mentioned by Gudea should, however, take into account that there are hundreds of copper deposits known to this day, and many have yielded traces of ancient workings. However, only few have been geochemically referenced, and even fewer were investigated by mining archaeologists. Hence, the documentation of the Central Iranian Veshnavah mining district can be considered exemplary (Stöllner et al. 2011); it attests to the systematic mining of copper in shafts and galleries following the ore veins at least since the 2nd millennium BCE, if not earlier. A similar date applies to the Deh Hossein open cast mines as far as these have been surveyed and tested (Nezafati and Pernicka 2011: 220).

Lead and silver

Silver occurs in association with lead and zinc in carbonate host rocks all over the Iranian highlands and in the Zagros in the form of galena (lead sulfide) or cerrrusite (lead carbonate). Iranian deposits are in modern times exploited for zinc but were probably silver mines in antiquity (Momenzadeh 2004a: 16–18 and Figure 5). Altogether, more than 35 sites with evidence for ancient exploitation are known today.

Extracting silver from argentiferous lead ores requires a refinement process to separate the silver from lead: the ore is smelted and heated to a temperature much above the melting point of silver; under oxidizing conditions, lead oxide (litharge) forms and metallic silver is separated. This complex so-called “cupellation” method is attested in Iran since the 4th millennium BCE in Arisman and Tappe Sialk (Nezafati and Pernicka 2006).

A by-product of silver mining may have been kohl (Persian: sormeh), a black eye cosmetic that could be produced from litharge (Momenzadeh 2004a). Lead was also the basis of a white cosmetic paste recently discovered as the content of a cosmetic container in Shahdad (Vidale et al. 2012).

Gold

Gold occurs in Iran mainly in relation with porphyry copper deposits, and is mined together with copper (Momenzadeh 2004a: 18 and map Figure 7). More than 100 occurrences of copper with associated gold are known. These mountain-gold deposits require underground mining, and the retrieved ores had to be ground into a fine powder. This could then be washed to let light-weight elements be carried away and the heavy gold would remain. Today gold is mined in 13 locations in Iran that all also have documented traces of ancient exploitation.

Tin

Tin is also bound to the TEMB and occurs in considerable quantities east of Elam, in Afghanistan and Central Asia (for the most recent overview see Thomalsky et al. 2013). It has long been assumed that these were the sources that provided tin to the emerging states in western Asia from the later 3rd millennium BCE onwards. While this model by and large remains valid for the bulk tin supply that was necessary to sustain the Elamite bronze industry, the discovery of the polymetallic Deh Hossein ancient mining district in northern Lorestan has for the first time also provided potential evidence for exploitable tin resources in Iran. Radiocarbon dating indicates the use of the Deh Hossein mines in the 2nd millennium BCE. Whether Deh Hossein was indeed exploited for its tin, or rather its copper, remains to be tested. The recognition of tin in Iran opens a new avenue of research into early tin bronze use in Iran and Western Asia in general, as more such deposits can be expected in Central and

eastern Iran. The Deh Hossein ores would have been suitable for the production of “natural” tin bronzes that would have stood out from normal copper by their silvery colour, or could have been targeted for their tin content. However, given the size of the deposit, the Deh Hossein mine could never have fully replaced imported tin that came from afar, probably from the East via the Persian Gulf.

Iron

Iron is the fourth most frequent metal present in the earth’s crust and is found in the porphyritic and metamorphic formations that frame the central highland of Iran (Momenzadeh 2004a: 18). The limiting factor in its exploitation was technological knowledge rather than its availability. Evidence for iron working is still extremely rare: E. Schmidt reported iron slag from Kamtarlan I, used as pavement material but possibly also residue of a smelter (van Loon 1989: 16 Plot M, area 3 and room 1). In NW-Iran, iron smelting slags were observed by G. Weisgerber in Andab Jadid, and a date in the Iron Age II/III is suggested by radiocarbon dates (Stöllner 2004: 56; only in the German version of text); however, neither Godin Tappe II nor Hasanlu IVB, both excavated on a large scale, yielded evidence for on-site production of iron. Since iron occurs in the same formations as silver ores, it has been suggested that recorded traces of iron mining may actually have targeted the silver (Momenzadeh 2004b: 18).

The metal industry in Elam over time

Proto-Elamite metallurgy

Proto-Elamite metal production is currently best documented in Arisman in western central Iran (Vatandoust, Parzinger, and Helwing 2011), where the complete chaîne opératoire of metalworking is attested from primary smelting to the finished artefact. The technology had developed in this area along the desert fringe of the Dasht-e Kavir throughout the Chalcolithic period with workshop contexts and cottage industry attested, for example, in Ghabrestan, and evidence also from Tappe Sialk and Arisman (Helwing 2013; Thornton 2014). Without any visible interruption in the technology, metalworking then gained an unprecedented scale and momentum in the last centuries of the 4th millennium BCE. In Arisman, large-scale copper smelting took place in furnaces located at the outskirts of the settlement; these furnaces were built from mud-brick and clay plaster, and had to be partly destroyed to extract the metal. The smelting process was not yet very efficient and resulted in an enormous amount of slag that still contained a considerable percentage of copper, altogether amounting to 180 tons of slag (Steiniger 2011). Casting and finishing of copper objects took place in workshops set up inside abandoned houses. The use of open moulds or two-piece flat moulds is attested for flat axes,

and mechanical hammering and annealing served to shape the final objects. Among the artefacts are mainly personal ornaments from proto-Elamite grave contexts but also some tools like chisels. From the casting moulds it is, however, evident that these sets are not representative and that flat axes and ingots were produced as well. These objects seem to have circulated in a wider exchange net, as evidenced by the occurrence of similar axes of a comparable elementary composition in the piedmont area of the Zagros, up to the Hamrin (Helwing 2013).

Analyses of the Arisman copper and copper slag indicates the systematic production of arsenical copper, from which all copper artefacts at the site are made. It has been proposed that this was a deliberate alloying process that involved in a first step the production of arsenic speiss, which was then in a second step added to the molten metal to prevent the arsenic from volatilisation (Rehren, Boscher, and Pernicka 2012). However, other scholars maintain that natural arsenical copper ores might have been used in a furnace that produced in the end a layered cake of metal of differing quality (Nezafati 2016).

Arisman is now also established as a major producer of silver by cupellation. Attested largely through litharge and one lump of metallic lead as production residues, Arisman silver was used for jewelry: one silver pendant was found in a deposit near the ground surface, probably a destroyed proto-Elamite grave; it belongs to a group of similar works distributed widely within the proto-Elamite exchange network (Helwing 2013).

The Arisman investigations considerably enrich our understanding of proto-Elamite copper working in other areas, as is also attested in Tal-e Malyan (Pigott, Rogers, and Nash 2003a; 2003b). Excavations at Malyan had not targeted specific workshop areas, and areas TUV and ABC rather randomly contained residues of metalworking, including copper prills from primary or secondary copper smelting. Malyan material contained small but consistent amounts of arsenic alongside nickel and antimony as trace elements, and it has been suggested that this arsenical copper might have been a natural alloy derived from ores of the Talmessi area. Working seems to have taken place inside the large house complexes uncovered in areas TUV and ABC, but these were not specialized workshop areas. Most artefacts are considered scrap metal for recycling, hence it remains to be determined whether a primary industry had existed in Malyan at all during the proto-Elamite/Banesh period.

In Susa IIIA, a large number of artefact analyses attests to the consistent use of arsenical copper and also of other copper alloys, including lead-copper with up to 15% lead used for cast objects (Tallon 1987: 316–320). Besides copper, lead, silver and gold or natural electrum are attested. With a large number of artefacts, the Susa record allows for a description of the techniques and typology used. Cold and hot hammering and annealing are attested, and the majority of artefacts were small tools and personal gadgets and ornaments. There are also a number of vessels that show the development of metal sheet and chasing techniques, as well as repoussé whereby the wall of the vessel is deformed from inside, which enabled the

formation of three-dimensional figures. Complex objects were cast in the lost wax technique that had appeared in western Asia in the late 5th millennium BCE (Roux, Mille, and Pelegrin 2013). In Susa lost wax casting was used for pins with complex figurative heads and small sculptures cast in the round, like two anthropomorphic figurines found in the vicinity of the High Terrace on the acropolis that date from the Uruk period (Tallon 1987: 307–308 no. 1320; Kargar and Loyrette 2001: 51, Figure 7). The same technique was also used for noble metals; for example, it was used for two dog pendants, one in silver and one in gold (Tallon 1987: nos. 1161–1162).

Trace element analyses on the copper artefacts indicate a possible supply from the Iranian highlands, possibly the Kashan – Tappe Sialk and Arisman region; another possible source could once more be the Talmessi area. Silver was used in Susa for jewelry and artful vessels. Silver sheet pendants with soldered-on casings for inlays are found in original shapes (Tallon 1987: nos. 1159–1160); vessels made of silver replicate forms known in ceramics such as spouted jugs. Some vessels, in particular small conical beakers, were made from lead and seem to imitate silver vessels (Tallon 1987: nos. 800–805). The Susa silver vessels and jewelry, however, only allow a glimpse at an evolving industry, whereas the major production seems to be lost to science.

Lastly, use of metal is also attested from graves in Lorestan. Assemblages of metal objects, including jewelry and weapons, are known from the Early Bronze Age graveyards in the high valleys excavated by Louis Vanden Berghe, like Kalleh Nisar and Mir Khair (Haerinck and Overlaet 2005; 2008; 2010). Many of these graves were used and re-used over a long period of time, making any period-specific statement difficult. Early tin bronzes are known from these graveyards, but no distinction between early and late 3rd millennium BCE is possible (Fleming et al. 2005). However, it is probably no coincidence that some of the earliest tin bronzes on record for Mesopotamia occur in Kish (Helwing 2009) and hence not too distant from the polymetallic mining district of Deh Hossein, which may have been exploited during early experimentation with local ores.

The 3rd millennium BCE

After the collapse of the proto-Elamite centers in the highlands, settled occupation is maintained only in a few areas of highland Iran. The former metallurgical centers in the highlands like Arisman were fully abandoned around 2900 BCE, and no settled occupation is attested in that area before the mid-2nd millennium BCE. The same is true for Malyan and southern Iran, although some continuity may have existed there in less visible zones. Only in Susa can continuous settlement layers and a few related graves be observed in phase Susa IIIB. The metallurgical record seems impoverished in comparison with the preceding period: gold and lead are not attested, silver only occurs in small spirals and complex cast copper objects

have disappeared. New shapes are daggers and spearheads as well as curved knives that find comparisons in the Hamrin ED I/II graveyards (Tallon 1987: 320–321). The material, insofar as it has been analysed, continues to be made of arsenical copper, and it seems that Susa still relied on supply from the Iranian highlands.

Around the 24th century BCE appear with phase IVA some new aspects in the metal industry of Susa (Tallon 1987: 322–332) that are shared over a wider area and that integrate impulses from the sumptuous burial culture of the southern Mesopotamian city states, in particular Ur. Some graves in Susa contained chariots like those known from Ur, and the typology of copper vessels was also closely related. Tin bronze makes a first appearance in Susa but at a much lesser scale (Tallon 1987: 333–335) than at Ur, where it makes up about 40% of the copper-based objects in the cemetery. At Susa, the majority of the assemblages was still dominated by arsenical bronzes and this remained so into the 2nd millennium BCE. Noteworthy is a hoard of tin bronze drinking vessels from the famous “vase à la cachette”, dating to the very end of Susa IVA (Tallon 1987: 329 Figs. 53; 54; 333), that corroborates the impression that tin bronze use was then reserved for members of the elite.

A second avenue for influence on the Susa IVA industry is exchange with southeastern Iran, where urban centers had emerged around the same time that the proto-Elamite central highland sites were abandoned. Shahr-e Sukhte, Shahdad and the Jiroft region yielded a rich record of metal objects, mainly from graves (Hakemi 1997; Piperno and Salvatori 2007; Pittman 2013). Shahdad and Shar-e Sukhte also yielded slags and ores, evidence for primary copper working. It has been proposed that ovens excavated in the “craftsmen’s quarter” site D in Shahdad were ancient copper furnaces (Hakemi 1992), but this reconstruction remains highly doubtful, as the kilns closely resemble domestic ovens known from settlement sites of the Bactrian-Margiana Archaeological Complex (BMAC), for example, in Gonur Depe (Boroffka 2015: Figure 4). While the site was certainly a primary production site, we have to rely largely on analyses of slags and of artefacts. Finds from the various graveyards are highly distinctive and comprise objects of arsenical copper and of silver, and to a much lesser extent of gold. Most characteristic are cast objects, like decorated tube-shaped maceheads (Hakemi 1997: type Go. 4) or magnificent decorated axe heads (Hakemi 1997: type Gp. 8, Gp. 9); also famous are metal basins with hollow animal figures in repoussé (Hakemi 1997: Gs. 4–7). Cast copper stamp seals of BMAC type allude to the distinct cultural influences that all leave a mark on the local record (Hakemi 1997: type Ia).

These urban centers of southeastern Iran developed in lockstep with the later ED period in Mesopotamia and with Susa IVA. Although strictly speaking outside of the sphere of Elamite interest, they are noteworthy for having maintained a primary metal industry based on arsenical copper. In between southeastern Iran and Susa, only a few related assemblages are known, but these are of high significance for the relations between the two regions: some *leitfossils* from Shahdad, in particular daggers with long, flat tang and drooping shoulders

(Hakemi 1997: Gq. 1–3) find a direct comparison in the recently excavated graveyard Deh Dumen in the Kohgiluyeh-Boyer Ahmad province (Oudbashi, Naseri, and Malekzadeh 2015). However, the vessels analysed from Deh Dumen are made from tin bronze with up to 15% of tin, unlike the Shahdad materials that only use arsenic bronze. This pattern indicates that the two sites participated in different supply networks for copper and tin.

When the Akkadian kings began expanding their territory and integrated Susa at least temporarily into their administration (Susa IVB), the previously existing sphere of shared styles and technologies across the Persian Gulf and the Iranian highlands disappeared. Those urban centers of southeastern Iran that continued to exist turned towards the Persian Gulf and the Indus. From a metallurgical point of view, these centres maintained an industry based on arsenical copper well into the 2nd millennium BCE. This observation remains somewhat puzzling, as the tin sources that were tapped into for supply of tin to the Mesopotamian states lay in the East, and most probably in Afghanistan, hence were spatially close. Possibly the tin supply to the emerging Mesopotamian states was rather negotiated through oversea trade. This was certainly the case when the Akkadian expansion reached out to distant regions of raw material supply, most ostentatiously by using imported black diorite or gabbro from Magan, modern Oman, for major monuments. This same supply area was then probably also used for a supply in copper, which was difficult to obtain from the notoriously unruly mountain people.

For Susa, the integration into Akkadian administration in phase IVB had repercussions in its material record (Tallon 1987: 337–339), and Susa's immediate hinterland seems to have participated in this shift. Forms and types were now strongly oriented toward Mesopotamian models, as is best evident from new types of battle axes whose prototypes we recognize in the Akkadian pictorial record. However, unlike the situation in Mesopotamia, it seems that the Susa IVB metal industry saw little technical innovation and had limited access to raw materials, both copper and alloying agents. A text from Susa provides a guideline for bronze alloying by adding one part of tin to eight parts of copper (Limet 1972; Tallon 1987: 339), however, tin bronze remained a rare material until the 2nd millennium BCE, and existing bronzes have minimal tin contents. Only two objects, both obviously prestige items, are exceptions to this rule: the battle axe of Ilish-mani with 5.9% tin and another axe with a ridged neck and a tin content of 4.9%. This uneven distribution corroborates the model that tin bronze was probably still reserved for prestige users as before in the “vase à la cachette” hoard. The only major innovation of period IVB is the introduction of silver as a currency, which aligns Susa with the administrative habits of the Akkadian state (Sallaberger 2013).

In the subsequent Susa V period (Ur III-Shimashki), the formerly unbalanced situation seems to have rapidly evened out (Tallon 1987: 340–352). Tin bronze has now become more common, in particular for weaponry. Some exceptional trace element compositions, for example, copper with antimony, also point to distant sources from where material was

probably imported. Other unusual trace elements are lead, nickel and iron, and arsenic also appears, sometimes in high amounts. These unusual mixtures may indicate a fairly high degree of recycling. Susa V also witnessed some important technical innovations: a new method to create a strong connection between a dagger blade and handle is “casting-on”, whereby a handle is cast in a clay mould that has been formed around the already existing blade tang; by pouring liquid bronze into this mould, the blade surface also melts and forms solid metal bonds with the handle material. The use of soldering as a technique to connect pieces of bronze relies on the same principle, and its discovery could be related; soldering had previously been observed only on silver jewelry in the proto-Elamite period.

The Susa V metal industry was embedded in a strictly urban setting with fully regulated administrative activities. The building undertakings of the Ur III kings at Susa made use of the same types of standardized foundation figures that are known from other monuments in Mesopotamia. Sixteen “basket bearers” inscribed with the name of Shulgi were found in Susa, eight each in the Inshushinak and in the Ninhursag temple (Rashid 1983: 32–165, Pl. 33; Tallon 1987: nos. 1321–1336, 308–310). These figures are solid casts that derive from two-valve moulds; some still have a burr visible around the outer contour of the figurine. However, they are all slightly different, which may indicate that they were indeed made in lost wax technique but that the wax model was cast in a mould and then finished by a different hand. It can only be speculated whether this technique may have influenced the change in the production of clay figurines as well, by introducing the use of unilateral clay moulds that standardised the treatment of the figurines (Spycket 1992: 54).

Bronzes from phase Susa V are largely found in graves, so the record must be considered biased. The assemblages contain objects of local production and types that link to Mesopotamian prototypes as well as materials related typologically to productions in either Lorestan or the distant East. A hammer axe inscribed in Sumerian with the name of the Ur III king Shulgi was certainly produced in the wider BMAC area, where the distinctive zoomorphic design was at home, and was used as a votive offering (Amiet 1966: 243 no. 176). A more likely Susian production is a distinctive axe type with a baroque inflated shaft named type “Attahushu” following the inscription on one such axe found in the Ville Royale at Susa (Tallon 1987: nos. 46–65).

A major component of the Susa V metal production was jewellery. While the record is certainly exaggerated due to the high number of grave inventories in this phase, it is nevertheless obvious that the Susa gold and silversmiths accomplished new forms and techniques during this time (Tallon 1987: 350). Golden pieces are often, in fact, electrum with 15 to 40% silver, which may indicate usage of placer gold imported from the East. The jewellery shapes stand out by their clear and elegant shaping, but the craftsmanship remains rather sloppy and sometimes merely imitates techniques established in Mesopotamia. For example, gold filigree and granulation were imitated in relief form.

This extensive discussion of Susa's metal industry and its wide-ranging contacts is necessarily biased, as the contemporary record for highland Fars in the Kaftari period remains fairly patchy. From the Tal-e Malyan excavations, only a handful of objects was retrieved, mainly rods or scrap metal (Carter 1996: 34–35). Six of the ten objects contain tin (Pigott, Rogers, and Nash 2003), which indicates that Malyan, like Susa, participated in a network that received its supply via the Persian Gulf trade.

The situation is different for the western Zagros in the late 3rd millennium BCE, at which time the rugged highland terrain of Lorestan and Ilam can be identified with Awan and Shimashki, home of the first Sukkalmah rulers of Susa. A highly original style of metalwork emerged there in the late 3rd millennium BCE, the beginning of a tradition that would last into the Iron Age. Unfortunately, many graves containing the so-called Lorestan bronzes have fallen victim to looting,¹ but the excavations by Louis Vanden Berghe have yielded invaluable information from documented contexts for the later Early Bronze Age and the Iron Age. Elemental composition analysis of some of his finds initially located the Early Bronze Age metal work from Lorestan squarely within the overall picture of a regulated Mesopotamian metal industry with access to tin bronze (Fleming et al. 2005). Lead isotope analysis, however, contradicts this finding and seems to indicate local supply systems based on sources in northern Lorestan in the Arak region (Begemann et al. 2008: 38). Arsenical copper was also still in use, and some objects were cast from lead-copper alloys.

The 2nd millennium BCE

The masterful study of F. Tallon and her colleagues on the Susa metals ends with Susa V (Tallon 1987, although some anecdotal 2nd millennium materials are included in the catalogue), hence before Elam came into being as a political player. This end date can be explained by the major interest of archaeometallurgists in questions of early supply systems and alloy practices, which are assumed to have been less significant in later periods when a high degree of recycling and mixing should be taken into account (although this too requires systematic testing). This by no means reflects an ancient reality, since Susa and Elam remained a major broker in the long-distance tin trade, which became ever more important (Reiter 1997: 213–239 on tin traffic according to 2nd millennium BCE texts). Susa has been the scholarly focus of Elamite studies, with attention directed largely to sculpture and works of figurative art (Tallon, Hurtel, and Drilhon 1989; Amiet 2006) and no longer to mundane artefacts and technologies. A notable exception is the recent study of daggers from Haft Tappe, which combines typological and analytical methods (Rafiei Alavi 2012). Hence, for the major part of Elamite history in the 2nd and 1st millennium, we have only selective studies of individual or just a few metal objects at our disposal, a situation made worse by the gaps in the

archaeological record of the highlands.

The first excavator of the Middle Elamite site of Haft Tappe (c. 1500–1300 BCE) claimed that scant metal finds had been preserved, as the city was raided before it was sacked around 1300 BCE (Negahban 1991: 45–46). This provides a misleading impression, as a recent study lists about 900 metal artefacts from the site.² Many metal objects were found in the workshop area of terrace complex I next to a pottery kiln; the excavator assumes that this kiln served alternatively for firing ceramics and for working metal. Several bronze ingots were found alongside a pile of arrowheads, some daggers and spearheads (Negahban 1991: 46–48 nos. 207–215, Pls. 30–31). Recent scientific analyses of the daggers, which are characterised by lunate-shaped guards forming the connection between hilt and blade, revealed that the guard was created through a complex process of casting-on onto a previously cast blade (Rafiei Alavi 2012). Among the axes found at Haft Tappe, one was identified as iron at the time of excavation (Negahban 1991: 47), but the finds were not submitted to analysis. Haft Tappe also yielded examples of decorative and prestige items. One is a massive shafthole axe inscribed with the owner's name in Elamite (Negahban 1991: 48 no. 217; Pl. 31, color Pl. 3A). Others are furniture and wall decorations, like two silver tubes (Negahban 1991: 113–114, Pl. 56) discovered in front of a door to terrace complex I, probably belonging together as end fittings of a wooden rod. A small bronze plaque with high relief and repoussé showing a ritual scene (Negahban 1991: 114 no. 481; Pl. 56) was collected from the environs of terrace complex I.

Late Middle Elamite Chogha Zanbil was largely deserted after the 11th century, although a modest settlement continued to exist on the site. The metal objects remained there in the temples together with other votives, and a number of metal weapons with inscriptions have been discovered in and around the Kiririsha temple. A decorative battle axe head dedicated by king Untash-Napirisha to the two Elamite deities, Napirisha and Ishnikarab, discovered in the Kiririsha temple is an interesting example for the artful combination of different metals, silver and electrum (Amiet 1966: 358 no. 265): the axe has an asymmetrical shaft that ends in the head of a lion holding the axe blade in its wide-open mouth. The neck of the axe is adorned by a three-dimensional figurine of a crouching boar made of electrum. The hatchet of Untash-Napirisha as well as many other objects, for example, a spade-shaped object with a joint between shaft and spade in the shape of a serpent's head discovered in a chapel northwest of the ziqqurat and identified with the symbolic spade of Marduk (Amiet 1966: 359 no. 266), demonstrate the potential of casting-on technology to safely combine different pre-fabricated modules, and hence also to join together different alloys and metals. This procedure allows the selection of materials best suited for specific purposes, like durable dagger blades versus soft but easy-to-decorate handles. It also provides possibilities for deliberately combining materials of different colours.

Statuettes from deposits on the acropolis of Susa

For the 2nd millennium BCE, two groups of statuettes from the acropolis of Susa are important; proposed dates range from the early 2nd millennium to the 12th century BCE and the Middle Elamite period.³ One group comprised 26 copper and bronze statuettes of mixed date, some going back to the early 2nd millennium (Tallon, Hurltel, and Drilhon 1989). The deposit was found underneath a Middle Elamite pavement close to the Inshushinak temple and was henceforth dubbed “Inshushinak deposit” (de Mecquenem 1905a). Most figurines are shown in a gesture of adoration and therefore the complex has been interpreted as a hoard of abandoned temple inventory; however, other scholars advocated its interpretation as a temple foundation deposit. The second group comes from a real hoard discovered in the cult precinct halfway between the ziqqurat and the Inshushinak temple (de Mecquenem 1905b). With its splendid objects, which included a solid figurine of silver and another of gold, as well as faience figurines, carnelian beads and a lapis lazuli dove, the hoard became known as “trouvaille de la statuette d’or”. It has been proposed that these objects may have formed part of the inventory of a treasury associated with the royal funerary cult, a *suhter* (Grillot 1983). As is the case with the above-mentioned hoard, not all objects must date to the same time, and it has been suggested that the silver and gold figurines may be as old as the early 2nd millennium BCE (Pittman 2003).

In the Inshushinak group is a figurine of a deity seated on a chair in the shape of a coiled serpent and surveyed by three upright serpents from behind (de Mecquenem 1905a: Pl. XVIII, 1; Tallon, Hurltel, and Drilhon 1989, no. 3). Despite a mediocre state of preservation, the deity’s long layered skirt is in line with standard iconography of the early 2nd millennium BCE, while the emphasis on serpents refers to the Elamite pantheon. The figure has been cast in the lost wax technique from a rather pure, un-alloyed copper. This choice of material sets it apart from the other objects in the group.

The other figurines in the Inshushinak deposit are humans in postures of worship or bearing offerings (see [Figure 7.2](#)). They differ in size and iconography but also quality of the representation. As a rule, these figurines were cast in one piece, but some have detached arms. A few pieces with some detail are produced as hollow casts; this sophisticated technique correlates with the use of alloys, copper with either tin or lead or both, indicating that the ancient craftsmen were aware of how to improve casting behaviour by using alloys; however, alloys were also used for solid casts, and with the small sample size no clear robust correlation between alloys and techniques can be determined.

Two figures from the Inshushinak hoard stand out by their quality of representation (Tallon, Hurltel, and Drilhon 1989, nos. 5, 12). One shows a worshipper with a raised hand and a long skirt ([Figure 7.2](#), centre). His hair protrudes far over his forehead in a typical Elamite fashion. The other figure bears a dove as an offering; he has a shaved head and a long, dotted skirt

([Figure 7.2](#), left). Together with a third, broken figurine, these are the only examples of hollow casting in the hoard. Interestingly, all three figures differ in their composition: the offering bearer is made from un-alloyed copper, while the worshipper is cast from tin bronze, and the fragmented figurine is made from a lead-copper alloy.



[Figure 7.2](#) Anthropomorphic figurines from Susa, 2nd millennium BCE, as an example of casting in lost wax technique
(Courtesy J. Álvarez-Mon).

The offering bearer from the Inshushinak deposit closely resembles the two solid figurines from the “trouvaille de la statuette d’or” ([Figure 7.3](#)) (de Mecquenem 1905b: Pl. XXIV). One is made of gold with some 6.5% silver and 1% copper; the other is of silver with traces of gold, copper and zinc (Harper, Aruz, and Tallon 1992: 146–148 Nos. 89, 90, F. Tallon). Both are mounted on a rather irregular piece of copper and both are shown carrying an animal and wearing a long, dotted skirt with fringes at the hemline. They differ in gesture and in particular in their hairdo, as they have a beard and wear a braid over their head, which may identify them as royal figures. Both figures were cast in the round in the lost wax technique.

Gesture and garment as well as the purity of its material link the god figurine from the Inshushinak deposit to three other deity images from Susa. All these deities are dressed in layered garments and wear the typical horned crown. One figurine is part of a composition, with the god seated like a rider on a chariot that has been cast separately from copper of a

different origin. One standing god has his left hand covered in gold sheet, probably the residue of an original gold plating of the complete figurine (Tallon 1987: 310 no. 1337). Such sheet gilding procedures were widely applied to sculptures made from less expensive material like wood. A silver “mask” found together with two silver hands also on the acropolis (de Morgan 1905: Pl. VII) may have belonged to such a wooden statue.⁴ The silver mask is a good example of how materials could be combined, as the eyes were inlaid in ivory. From the same cache came two “wigs”, probably parts of composite figurines, that combine frit and gold, or frit and bronze (de Morgan 1905: Pl. VIII, IX).



[Figure 7.3 Statues of worshippers in solid gold \(right\) and silver \(middle and left\) from the so-called *trouvaille de la statuette d'or* at Susa \(Courtesy J. Álvarez-Mon\).](#)

The two figurines from the “trouvaille de la statuette d’or” are fixed to their support by a rod described as “anchor-shaped”. Others have simple rods indicating that they were once fixed onto a support; some figurines are shaped as if to fit a support; we can therefore assume that many of these small figurines did not serve as an end in themselves but adorned practical equipment like chariots or pieces of furniture.

More metal from the deposits on the acropolis

Numerous small hoards of valuables and scrap gold and silver were found on the acropolis in the zone of the Inshushinak temple foundations (de Mecquenem 1905a). Stratigraphic control is poor, and the distinction between the Ur III temple foundation and the Middle Elamite

temple remained doubtful in many instances, but a good number of the objects belong to the Middle Elamite period. Besides the bronze figurines already described above, a wealth of small-scale metalwork, including golden sun discs and inscribed gold sheet fragments, was discovered. Among the “trouvaille de la statuette d’or” objects was also a golden whetstone finial in the shape of a lion’s head with fine granulation (de Mecquenem 1905b: Pl. XXIV). A gilded dragon head made of silver (de Mecquenem 1905a: Pl. XIII, 1a-b) has not been subject to an examination of the technique used.

Monumental sculpture

With the development of hollow casts in the 3rd millennium BCE, most famously attested through the copper head of an Akkad ruler found at Nineveh (Strommenger 1962: Pl. XXII-XXIII), size limitations on bronze sculpture had been overcome and the only remaining limitation was the available amount of copper/bronze. In Elam a life-size sculpture is attested in the Middle Elamite period, when some of the most spectacular metal sculptures were made in Susa (de Morgan 1900a; de Morgan 1900b). Some sculptures were exceptionally large and heavy; they were cast in complex procedures that are best studied in the famous statue of Napir-Asu (see below) and a related fragment. We can only assume that despite these spectacular finds, much material is missing from the record: Many objects show traces of heavy mutilation, probably inflicted when Susa was defeated and sacked by the Assyrians.

The largest piece of bronze sculpture found in Susa during the excavations of de Morgan on the Susa acropolis in the area of the Ninhursag temple is the statue of Queen Napir-Asu ([Figure 7.4](#)) (Lampre 1905; Amiet 1966: 340, 372 no. 280; Amiet 1988: 97–98 Figure 57; Spycket 1981: 313–314 Pl. 204; Harper, Aruz, and Tallon 1992: 132 no. 83; Potts 1999: 218–220 Pl. 7.3), wife of Untash-Napirisha, who commissioned the construction of the ziqqurat at Chogha Zanbil. The inscription names the queen and ends with a curse formula that evokes the Elamite deities Napirisha, Kirisisha and Inshushinak. It is the only monumental metal sculpture from Elam surviving almost intact, although the head and most of the left arm were removed in antiquity. This treatment of statues was not exceptional, since another fragment of a life-size statue in the Louvre museum (Amiet 2006) seems to have belonged to an even larger statue of better execution. The Napir-Asu statue is a standing female with hands crossed before the body in a posture reminiscent of the earlier worshipping figures. It is preserved to 1.29 m height (up to shoulder level) and weighs 1.75 tons.



[Figure 7.4 Middle Elamite Statue of Queen Napir-Asu from Susa \(Courtesy J. Álvarez-Mon\).](#)

Examinations of the statue (Lampre 1905; Harper, Aruz, and Tallon 1992: 132–135 no. 83, by F. Tallon, see 135 footnote 11; Meyers 2000) provide detailed insight into the complex casting process. The statue consists of an outer shell and a solid core of copper which are significantly different in composition: the outer shell consists of copper with some trace elements and about 1% tin; the core is cast of bronze with 11% tin. The two types of metal differ in their melting points: the copper from the outer shell melts at a much higher temperature than the tin bronze of the core. Casting Napir-Asu followed a multiple-step process: first, a core was constructed from small clay bricks, and fired; then the core was embedded in wax and sculpted, with solid arms and hands, and the major elements of the garment decoration were laid in. A metal plug on the top had been planned to accommodate a core pin to mount the separately cast, now lost, head. Copper chaplets were inserted through the wax into the clay core, and then this model was encased in clay. The wax was molten and a cavity left behind to be filled with copper. In a next step, the clay core was removed, the copper shell turned upside down and the interior filled with consecutive casts of tin bronze. Further work steps would include the removal of grates, polishing and decorating. The copper of the outer shell is physically softer than the bronze used for the core, facilitating the chasing and punching of the details of the garments. It may also have helped to fix a gold foil wrapped around the statue in a way similar to the gold plating observed on smaller statues; the existence of a long vertical groove on both sides of the statue may indicate original plating for this piece as well. The solid bronze core remains a puzzle as it appears a remarkable waste of valuable material. It has been

speculated that it helped to stabilize the (over-) fragile shell (Amiet 2006) or served to hide valuable material (Meyers 2000) and safeguard it from potential looting: in Mesopotamia, valuable materials were turned into temple inventory as a way to obtain divine protection for this material that was calculated according to weight, not according to the skill of craftsmanship. A second, but equally hypothetical alternative is that this core contained material recycled from a war booty of weapons that had been made from high-quality tin bronze.

Other extraordinary bronze works are two giant cylinders with inscriptions by Shilhak Inshushinak, each 4.36 m long, discovered in 1901 on the acropolis (de Mecquenem 1980: 14). The same king ordered the making of a bronze plate with a complex figurative cult scene that was found during excavations at the acropolis of Susa (Gautier 1911), not far from Napir-Asu's statue. This model, called *Sit-Shamshi*, shows two kneeling men involved in a ritual ([Figure 7.5](#)). They are surrounded by cult paraphernalia, men and objects rendered as three-dimensional models attached to a flat plinth. X-ray investigations allow the production process to be detailed (Harper, Aruz, and Tallon 1992: 137–141 no. 87 Figure 43; F. Tallon, analyses F. Drillhon): the bronze plinth was cast upside down in a mould together with some solid modules. The figures of the two men had been cast separately beforehand and were joined to the model by casting-on the plate. Some larger objects like the basins and pillars were cast together with the plate; the altars, jars and trees were cast separately and secured with pins. The trees and other objects, some lost today, were fixed with rivets. The material used is low tin bronze, with a slightly higher tin amount in the elements cast separately like the altars. One side of an altar preserves residue of silver, indicating that possible silver and gold foil was originally added to the model for a colour effect.



[Figure 7.5](#) Model of a Middle Elamite ritual scene from Susa, so-called *sit-shamsi* (Courtesy J. Álvarez-Mon).

A few more cast monumental bronzes were found in Susa. Among them are the “serpent table”, a fragmented table of bronze framed by two large uncoiled snakes, surrounded by a row of five standing figures holding vessels before them in a posture comparable to that of the figures on the façade of the reconstructed Inshushinak temple (de Morgan 1900a). This table has variously been called an offering table or an altar cover. A fragment of a cast bronze vessel with high relief may originally have been covered by gold sheet as the finishing of the copper surface is rather rough (Amiet 2006, 74). The same may have been true for a fragment of a bronze stele from the acropolis mound (de Morgan 1900b) whose original size cannot be reconstructed. It is organised like a stone stele in registers, the main register showing a row of seven divine warriors.⁵ An inscription in Elamite has been inserted between the figures of the main frieze. No technical investigation has been carried out, but it seems the plate was cast solidly from the back, and the botanical decoration of the lower register was punched.

Middle Elamite texts

With all the large-scale monumental pieces just listed, we may be able to gain a better understanding of the amount of material that was originally in circulation and also how much has been lost over time. This is best exemplified by the situation at Middle Elamite Malyan, known from the excavations in area EDD on the highest part of the mound where a monumental building was partly exposed (Carter 1996). Although it is evident that this is a building of monumental scale, only very few metal items were found there in layers IV and III; no evidence for metal production is recorded either, as any workshop would have been located away from the elite residence. However, the building contained the scattered remains of an archive of texts recording accounts and recipes for metalworking (Stolper 1984). As one of the major texts names the Elamite king Huteludush-Inshushinak, a date around 1100 BCE for the corpus is realistic. Texts belonging to a different archive dealt with animal hides and food, which indicates a spatially differentiated administration for individual crafts. The metal-related tablets are written in Elamite but use Akkadian loan words, for example, for copper and bronze. The tablets are written following a standard formula: first the relevant metals and their respective weight are listed, then orders are made for objects to be made from the metal, mostly figurines, rosettes and door embellishments for temple adornment. The tablets end by naming the administrator and a date formula. The amounts of material listed vary widely and for gold run from 1 to 1,445 shekel and for copper/bronze from 2.5 to 3,600 shekel; the total copper/bronze transactions recorded add up to 36,000 shekel, a little more than 300 kg (Stolper 1984: 10). This provides us a glimpse at the amount of material that went into the lavish decoration of temples and palaces; it also reminds us of how much archaeological evidence we are missing. The texts from Haft Tappe, once fully read (Herrero and Glassner 1990; 1991;

1993; 1996), will probably provide a similarly impressive picture of the amounts of metal in circulation during the Middle Elamite period.

Iron

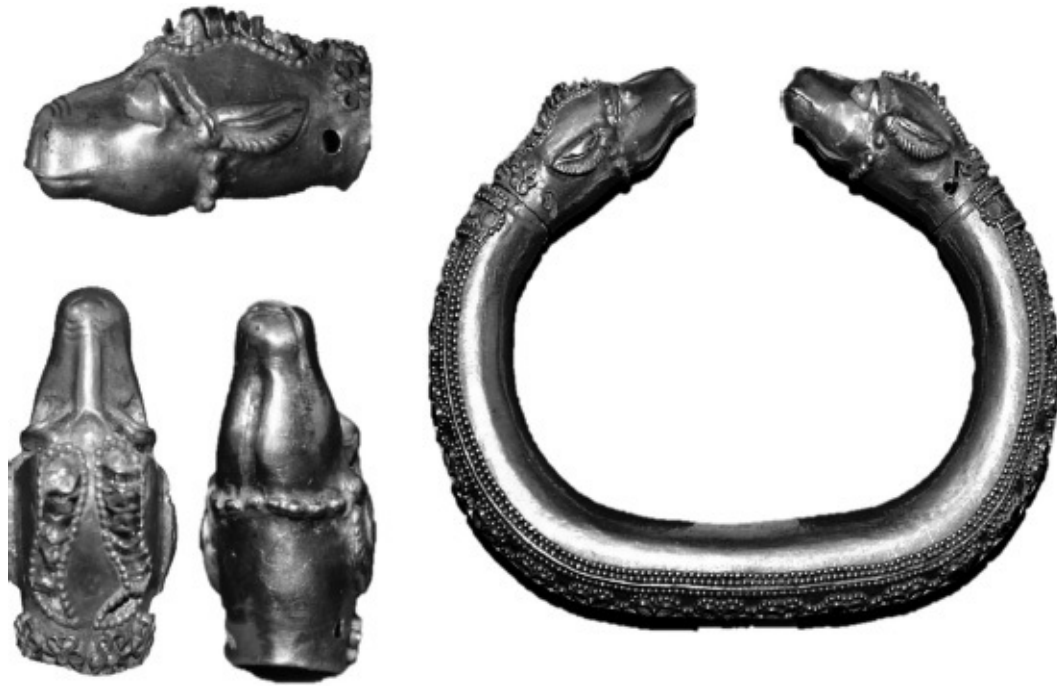
Worked iron occurs in Iran occasionally from the Late Bronze Age onwards, but it becomes more widespread only in the Iron Age II from the 10th to the 9th century BCE (Pigott 1977; 1980; 1989; Overlaet 2003: 150–151); initially, the majority of objects are decorative items and jewellery such as bracelets and rings. In weaponry, bronze was used for arrowheads alongside iron well into the 8th century BCE. Only in Iron Age III did iron become the material of choice for armament, while bronze remained in use for decorations and sheet metal objects that required chasing and repoussé. Iron was hence not used at first for any physical properties of the material, and most probably these were not known yet: to take advantage of the strength of iron, the material must be forged into steel; low-carbon wrought-iron objects would be at best equivalent to tin bronze in their efficiency as long as the technology of steel production had not yet been developed. As indicated by the recurrent usage of iron for objects of personal adornment in the early phase, the material seems then to have carried a certain prestige, at least during the early periods of its use.

No workshops are known up to today, just a few slag fragments (see above, iron), and the only evidence for the introduction of iron are the artefacts proper. From Iron Age II onwards appear bi-metallic artefacts: pins with a figurative bronze head and an iron shaft, or daggers with iron blades and a bronze hilt. It has been remarked that the technology behind the production of bi-metallic daggers was unusually complicated, as it remained difficult to unite two such different materials in one object.

Royal tombs with jewellery and metalwork

The dearth of settlement sites for the Neo-Elamite period that results by necessity in a lack of metal finds in the archaeological record is balanced out by the discovery of three extraordinary assemblages of the last decades of the Neo-Elamite occupation. Two are funerary constructions found by accident in Jubaji (Shishegar 2015) and in Arjan (Alizadeh 1985; Álvarez-Mon 2010), both in the Ram Hormoz area; these burial chambers contained bronze coffins in the shape of bathtubs, and a wealth of jewellery (e.g. the gold animal-headed terminal bracelet in Figure 7.6) and luxury vessels made of gold and electrum, silver and bronze; the third is a complex of silver vessels and other objects allegedly from the Kalmakarre Cave (Bashash Kanzagh 2000; for a critical discussion, see Henkelman 2003), that has partly been confiscated from looters and whose unity cannot be proved.

Many objects from these complexes attest Elamite-style iconography: both Jubaji and the Arjan tomb yielded gold rings with broadened disc-shaped open terminals; one of these “power rings” was inscribed with a royal name; noteworthy are also the small seated ladies with a fishtail that adorn the handles on some of the silver and bronze pans in Jubaji. No systematic archaeo-metallurgical analysis has yet been conducted on any of these objects. However, it is evident that Elamite artisans were familiar by now with all techniques of casting and chasing, repoussé and chiseling, as well as soldering, filigree and granulation.



[Figure 7.6 Animal-headed bracelet from the “tomb of the two Elamite princesses” at Jubaji \(Courtesy J. Álvarez-Mon\).](#)

Conclusion

A few patterns in the organisation of metalwork in Elam through time become evident from this brief overview, despite the biased research situation. Beginning with material provisioning, Elam always depended on supply from outside; first it was part of the proto-Elamite long distance network; when this waned, the mid-3rd millennium BCE saw the exchange prestigious items over long distances; Elam and Susa, in particular, form a node in this exchange, bringing substantial exotic material into the country. With the integration into the Mesopotamian state, the exchange and supply seems to have been temporarily cut off in two directions – the overland contacts had already waned, and the seaborne trade shifted under the control of imperial administrators. Only from the second millennium BCE onwards had a steady supply of tin built up that also reached the mountainous hinterland of Susa.

Silver supplies seem firstly to have been obtained from the Iranian highlands, but then

probably shifted as well when the former highlands centres were abandoned. The origin of gold is not known; there would have been opportunities for gold mining in highland Iran as well as further east. Iron, lastly, appeared in the last centuries of the 2nd millennium BCE.

Technically, copper smiths and jewellers in Elam were at all times level with the Mesopotamian manufactures. Alleged elements of delay and a lack of refinement that have been raised previously cannot be verified against the material record due to the poor chronological control of the archaeological record from Susa, and it will remain a major effort for future research to scrutinise these claims. What is evident, however, is the enormous amount of material and skilled work that went into projects commissioned by the Middle-Elamite (and probably, but still less visible, also later the Neo-Elamite) state, as is attested from artefacts and from texts alike.

Notes

- [1](#) For a brief overview on the history of research, see Overlaet 2003: 14–16.
- [2](#) A new investigation of 900 Middle Elamite metal artefacts from Haft Tappeh has recently been undertaken by Babak Rafiei-Alavi (Rafiei Alavi 2015). I wish to thank Babak for allowing me access to this still unpublished corpus.
- [3](#) The problem of dating these deposits that seem to contain some material which was old at the time of deposition is not pursued further here. The reported circumstances of the discoveries are sometimes vague or contradictory. Usually both groups are dated to the 13th century BCE, while the individual objects may well be considerably older, see (Braun-Holzinger 1984 to name but the most explicit statements; Tallon, Hurtel and Drilhon 1989; Pittman 2003).
- [4](#) This cache is often dated to the Neo-Elamite period for stylistic reasons, as the silver face seems a bit more “puffy” than is usual in the middle Elamite period. De Morgan himself insists on a middle Elamite date in the 11th century at the latest; interestingly, several iron blades are said to have been found with the silver mask.
- [5](#) While it is certainly a possibility that the fragment relates to an “archaizing Elamite” iconography, as proposed recently by (Alvarez-Mon 2015) in an attempt to date the piece to the 9th–8th century BCE, I would nevertheless classify it with the other monumental works of art in the final middle Elamite period, as the monumental bronze relief calls for display in a splendid and undefeated capital. Following the sack of Susa in 1153 BCE, the Elamites retreated into the mountain zones, and population and settlement in the plains was much reduced. No representative architecture is to be expected for the coming 200 years, and with this, no monumental sculpture either.

Bibliography

- Alizadeh, A. 1985. A Tomb of the Neo-Elamite Period at Arjān, Near Behbahan. *Archäologische Mitteilungen aus Iran* 18: 49–73.
- Álvarez-Mon, J. 2010. *The Arjan Tomb: At the Crossroads of the Elamite and the Persian Empires*. Acta Iranica 49. Leuven: Peeters.

- . 2015. Like a Thunderstorm: Storm-Gods “Sibitti” Warriors from Highland Elam. *Annali, Università degli studi di Napoli “L’Orientale”* 74: 17–46.
- Amiet, P. 1966. *Élam*. Archée, Auvers-sur Oise.
- . 1986. *L’âge des échanges inter-iraniens. 3500–1700 avant J.C.* Editions de la Réunion des Musées Nationaux, Paris.
- . 1988. *Suse, 6000 ans d’histoire*. Éditions de la Réunion des Musées Nationaux, Paris.
- . 2006. Les bronzes oubliés de Suse. *Revue d’Assyriologie et d’Archeologie Orientale* 100: 71–73.
- Arab, R. and Rehren, T. 2004. The Wertime Pyrotechnological Expedition of 1968. *Institute for Archaeo-Metallurgical Studies* 24: 29–34.
- Bashash Kanzagh, R. 2000. *Whispering of treasury. Objects attributed to Kalma Kare Cave*. Iranian Cultural Heritage Organisation, Tehran.
- Begemann, F., Haerinck, E., Overlaet, B., Schmitt-Strecker, S. and Tallon, F. 2008. An Archaeo-Metallurgical Study of the Early and Middle Bronze Age in Luristan, Iran. *Iranica Antiqua* 43: 1–66.
- Berthoud, T., Besenval, R., Cleuziou, S., Francaix, J. and Liszak-Hours, J. 1976. *Les anciennes mines de cuivre en Iran. Recherche cooperative sur programme 442*. Paris: University Pierre et Marie Curie.
- Berthoud, T., Cleuziou, S., Hurtel, L.P., Menu, M. and Volfovsky, C. 1982. Cuivre et alliages en Iran, Afghanistan, Oman au cours des IVe et IIIe millénaires. *Paléorient* 8/2: 39–54.
- Boroffka, N. 2015. Gonur Depe. Eine bronzzeitliche Königsstadt in Mittelasiien. *Mitteilungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte* 15: 15–24.
- Braun-Holzinger, E.A. 1984. *Figürliche Bronzen aus Mesopotamien*. Prähistorische Bronzefunde, edited by H. Müller-Karpe. Beck, München.
- Carter, E. 1996. *Excavations at Anshan (Tal-e Malyan): The Middle Elamite Period*, edited by W. Sumner. University of Pennsylvania, University Museum, Philadelphia.
- Fleming, S.J., Pigott, V.C., Swann, C.P. and Nash, S.K. 2005. Bronze in Luristan: Preliminary Analytical Evidence from Copper/Bronze Artifacts Excavated by the Belgian Mission in Iran. *Iranica Antiqua* 40: 35–64.
- Fleming, S.J., Pigott, V.C., Swann, C.P. et al. 2006. The Archaeometallurgy of War Kabud, Western Iran. *Iranica Antiqua* 41: 31–57.
- Frame, L. 2004. Investigations at Tali-i Iblis: Evidence for copper smelting during the Chalcolithic period. BSc, Massachusetts Institute of Technology, Boston.
- . 2009. *Technological Change in Southwestern Asia; Metallurgical Production Styles and Social Values During the Chalcolithic and Early Bronze Age*. PhD, The University of Arizona, Department of Anthropology, Tuscon.
- . 2010. Metallurgical Investigations at Godin Tepe, Iran, Part I: The Metal Finds. *Journal of Archaeological Science* 37/7 (July): 1700–1715. doi:10.1016/j.jas.2010.01.030.
- Gautier, J.-E. 1911. Le “Sit Samsi” de Silhak in Susinak. In: *Recherches archéologiques*. Mémoires de la Délégation en Perse 12. Paris: Ernst Leroux, 143–151.
- Grillot, F. 1983. Le suhter royal de Suse. *Iranica Antiqua* 18: 1–23.
- Haerinck, E. and Overlaet, B. 2005. *Luristan Excavation Documents VI. Bani Surmah. An Early Bronze Age graveyard in Pusht-i Kuh, Luristan*. Leuven: Peeters.

- . 2008. *Luristan Excavation Documents VII. The Kalleh Nisar Bronze Age Graveyard in Pusht-i Kuh, Luristan*. Leuven: Peeters.
- . 2010. *Luristan Excavation Documents VIII. Early Bronze Age Graveyards to the West of the Kabir Kuh (Pusht-i Kuh, Luristan)*. Leuven: Peeters.
- Hakemi, A. 1992. The copper smelting furnace of the Bronze Age at Shahdad. In *South Asian Archaeology 1989*, edited by J.-F. Jarrige, 119–132. Monographs in Old World archaeology. Madison, Wisconsin.
- . 1997. *Shahdad: Archaeological Excavations of a Bronze Age Center in Iran*. IsMEO, Roma.
- Harper, P.O., Aruz, J. and Tallon, F. (eds.) 1992. *The Royal City of Susa: Ancient Near Eastern Treasures in the Louvre*. New York: The Metropolitan Museum of Art.
- Hauptmann, A., Weisgerber, G. and Bachmann, H.-G. 1988. Early Copper Metallurgy in Oman. In: Maddin, R. (ed.) *The Beginning of the Use of Metals and Alloys*. Cambridge: MIT Press, 34–51.
- Helwing, B. 2009. Rethinking the Tin Mountains: Patterns of Usage and Circulation of Tin in Greater Iran from the 4th to the 1st Millennium B.C. *TÜBA-AR. Turkish Academy of Sciences Journal of Archaeology* 12: 209–221.
- . 2011. Conclusions: The Arisman Copper Production in a Wider Context. In: Vatandoust, A., Parzinger, H. and Helwing, B. (eds.) *Early Mining and Metallurgy on the Western Central Iranian Plateau. Report on the First Five Years of Research of the Joint Iranian-German Research Project*. Archäologie in Iran und Turan 9. Philipp von Zabern, Mainz am Rhein, 523–531.
- . 2013. Early Metallurgy in Iran – an Innovative Region as Seen from the Inside. In: Burmeister, S., Henkelman, S. and W.F.M. (ed.) *Metal Matters. Innovative Technologies and Social Change in Prehistory and Antiquity Defining Neo-Elamite History*. *Bibliotheca Orientalis* 60/3–4: 251–263.
- Herrero, P. 1991. Appendix IV. Tablettes administratives de Haft-Tépé. In: Negahban, E.O. (ed.) *Excavations at Haft Tappeh, Iran*. University Museum Monograph 70. University Museum, University of Pennsylvania, Philadelphia, 127–152.
- Herrero, P. and Glassner, J.J. 1990. Haft-Tépé: choix de textes I. *Iranica Antiqua* 25: 1–45.
- . 1991. Haft-Tépé: choix de textes II. *Iranica Antiqua* 26: 39–80.
- . 1993. Haft-Tépé: choix de textes III. *Iranica Antiqua* 28: 97–135.
- . 1996. Haft-Tépé: choix de textes IV. *Iranica Antiqua* 31: 51.
- Kargar, M.R. and Loyrette, H. 2001. *Les recherches archéologiques francaises en Iran*. Iran National Museum, Tehran.
- Lafont, B. 1996. L'extraction du minerai du cuivre en Iran à la fin du III^e millénaire. In: Tunca, Ö. and Deheselle, D. (eds.) *Mélanges offerts à Monsieur H. Limet*. Mémoires. Université de Liège, Liège, 87–93.
- Lampre, G. 1905. *Statue de la reine Napir-Asou*. Mémoires de la Délégation en Perse 8. Paris: Ernest Leroux, 245–250.
- Limet, H. 1972. Les métaux à l'époque d'Agade. *Journal of the Economic and Social History of the Orient* 15: 3–24.
- van Loon, M. 1989. Kamtarlan I. In: Schmidt, E.F., Loon, M.V. and Curvers, H.H. (eds.) *The Holmes expeditions to Luristan*. Oriental Institute Publications 108. Oriental Institute of the University of Chicago, Chicago, 15–18.
- Malfoy, J.-M. and Menu, M. 1987. La métallurgie du cuivre à Suse aux IV^e et III^e millénaires: analyses en laboratoire. In: Tallon, F. (ed.) *Métallurgie Susienne*. Notes et Documents des Musées de France 15. Editions de la Réunion des musées nationaux, Paris, 355–377.
- de Mecquenem, R. 1905a. Offrandes de fondation du Temple du Chouchinak. In: Morgan, J. (ed.) *Recherches archéologiques*.

- Mémoires de la Délégation en Perse 5. Librairie Ernest Leroux, Paris, 61–130.
- . 1905b. Trouvaille de la statuette d'or. In: Morgan, J. (ed.) *Recherches archéologiques*. Mémoires de la Délégation en Perse 7. Ernst Leroux, Paris, 131–136.
- . 1980. Les fouilleurs de Suse. *Iranica Antiqua* 15: 1–48.
- Meyers, P. 2000. The Casting Process of the Statue of Queen Napir-Asu in the Louvre. *Journal of Roman Archaeology Supplementary Series* 59: 11–18.
- Momenzadeh, M. 2004a. Metallic Mineralic Resources of Iran, Mined in Ancient Times. A Brief Review (English version on cd only). In: Stöllner, T., Slotta, R. and Vatandoust, A. (eds.) *Persiens antike Pracht*. Deutsches Bergbau-Museum, Bochum, 8–21.
- . 2004b. Metallische Bodenschätze in Iran in antiker Zeit. Ein kurzer Überblick. In: Stöllner, T., Slotta, R. and Vatandoust, A. (eds.) *Persiens antike Pracht*. Deutsches Bergbau-Museum, Bochum, 8–21.
- de Morgan, J. 1900a. Description des objets d'art. Table de bronze. In: Morgan, J. (ed.) *Recherches archéologiques. Fouilles à Suse en 1897–1898 et 1898–1899*. Mémoires de la mission archéologique en Perse 1. Librairie Ernest Leroux, Paris, 161–162 Pl. 12.
- . 1900b. Description des objets d'art. Bas-relief de bronze. In: Morgan, J. (ed.) *Recherches archéologiques. Fouilles à Suse en 1897–1898 et 1898–1899*. Mémoires de la mission archéologique en Perse 1. Librairie Ernest Leroux, Paris, 163–164 Pl. 13.
- . 1905. Trouvaille du masque d'argent. In: Morgan, J. (ed.) *Recherches archéologiques*. Mémoires de la Délégation en Perse 7. Ernst Leroux, Paris, 43–47.
- Negahban, E.O. 1991. *Excavations at Haft Tappeh, Iran*. University Museum Monograph 70. University Museum, University of Pennsylvania, Philadelphia.
- Nezafati, N. 2016. Recent developments in ancient mining and archaeometallurgy in Central Iran. In *On salt, copper, and gold: the origins of early mining and metallurgy in the Caucasus. Proceedings of the International Conference, Tbilisi June 16th–19th 2016 under the auspices of the Georgian National Museum*. Tbilisi, June 17.
- Nezafati, N. and Pernicka, E. 2006. The smelters of Sialk. Outcomes of the first stage of archaeometallurgical researches at Tappeh Sialk. In: Malek Shahmirzadi, S. (ed.) *The fishermen of Sialk. Sialk Reconsideration Project, Report 4*. Archaeological Report Monograph Series, Tehran, 79–102.
- Nezafati, N. and Pernicka, E. 2011. Early tin-copper ore from Iran, a possible clue for the enigma of tin bronze. In *Anatolian Metal V/Ünsal Yalçın*, edited by Ünsal Yalçın, 211–230. neue Ausg. Deutsches Bergbau-Museum, Bochum.
- Nezafati, N., Pernicka, E. and Momenzadeh, M. 2006. Ancient tin: Old question and a new answer. *Antiquity* 80: 308.
- . 2009. Introduction of the Deh Hosein Ancient Tin-Copper Mine, Western Iran: Evidence from Geology, Archaeology, Geochemistry and Lead Isotope Data. *TÜBA-AR: Journal of the Turkish Academy of Sciences* 12: 223–236.
- Oudbashi, O. and Davami, P. 2014. Metallography and microstructure interpretation of some archaeological tin bronze vessels from Iran. *Materials Characterization* 97 (November): 74–82. doi:10.1016/j.matchar.2014.09.007.
- Oudbashi, O. and Emami, S.M. 2010. A Note on the Corrosion Morphology of some Middle Elamite Copper Alloy Artefacts from Haft Tappeh, South-West Iran. *Studies in Conservation* 55(1): 20–25.
- Oudbashi, O., Emami, S.M., Malekzadeh, M., Hassanpour, A. and Davami, P. 2013. Archaeometallurgical studies on the

- bronze vessels from “Sangtarashan”, Luristan, W-Iran. *Iranica Antiqua* XLVIII.
- Oudbashi, O. and Hasanpour, A. 2016. Microscopic study on some Iron Age bronze objects from Western Iran. *Heritage Science* 4(1) (April 6): 8. doi:10.1186/s40494-016-0079-0.
- Oudbashi, O., Naseri, R. and Malekzadeh, M. 2015. Technical Studies on the Bronze Age Metal Artefacts from the Graveyard of Deh Dumen, South-Western Iran (Third Millennium BC). *Archaeometry* (January 1): n/a-n/a. doi:10.1111/arcm.12208.
- Overlaet, B. 2003. *Luristan Excavation Documents IV. The Early Iron Age in the Pusht-i Kuh, Luristan*. Leuven: Peeters.
- Pernicka, E., Momenzadeh, M., Vatandoust, A., Adam, K., Böhme, M., Hezarkhani, Z., Nezafati, N., Schreiner, M. and Winterholler, B. 2011. Archaeometallurgical Research on the Western Central Iranian Plateau. In: Vatandoust, A., Parzinger, H. and Helwing, B. (eds.) *Early Mining and Metallurgy on the Western Central Iranian Plateau. Report on the First Five Years of Research of the Joint Iranian-German Research Project*, 633–687. *Archäologie in Iran und Turan* 9. Philipp von Zabern, Mainz am Rhein.
- Pigott, V.C. 1977. The question of the presence of iron in the Iron I period in Western Iran. In: Levine, L.C. and Cuyler Young, T. (eds.) *Mountains and lowlands: Essays in the Archaeology of Greater Mesopotamia*. Bibliotheca Mesopotamica 7. Undena, Malibu, California, 209–234.
- . 1980. The Iron Age of Western Iran. In: Wertime, S.F. and Muhly, J.D. (eds.) *The Coming of the Age of Iron*. New Haven: Yale University Press, 229–266.
- . 1989. The emergence of iron use at Hasanlu. *Expedition* 31(2–3): 67–79.
- . 1999. A heartland of metallurgy. Neolithic/Chalcolithic metallurgical origins on the Iranian Plateau. In: Hauptmann, A., Pernicka, E., Rehren, T. and Yalçın, Ü. (eds.) *The Beginnings of Metallurgy. Proceedings of the International Conference “The Beginnings of Metallurgy”, Bochum 1995*. Der Anschnitt, Beiheft 9. Deutsches Bergbau-Museum, Bochum, 107–120.
- Pigott, V.C., Rogers, H.C. and Nash, S.K. 2003. Archaeometallurgical investigations at Malyan. In: Miller, N.F. and Abdi, K. (eds.) *Yeki Bud, Yeki Nabud: Essays on the Archaeology of Iran in honor of William M. Sumner*. Cotsen Institute of Archaeology at UCLA, Los Angeles, 160–175.
- . 2003a. Archaeometallurgical investigations at Tal-e Malyan: Banesh Period Finds from ABC and TUV. In: Sumner, W.M. (ed.) *Early Urban Life in the Land of Anshan: Excavations at Tal-e Malyan in the Highlands of Iran* Malyan Excavation Reports 3: 94–102. University Museum Reports 117. University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia.
- . 2003b. Appendix A Part IIA. Copper base metal finds from ABC and TUV. In: Sumner, W.M. (ed.) *Early Urban Life in the Land of Anshan: Excavations at Tal-e Malyan in the Highlands of Iran*, Malyan Excavation Reports 3: 149–159. University Museum Reports 117. University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia.
- Piperno, M. and Salvatori, S. 2007. *The Shahr-i Sokhta graveyard (Sistan, Iran): Excavation campaigns 1972–1978*, edited by I.I.p.I.A.e. l’Oriente. Istituto Italiano per l’Africa e l’Oriente, Roma.
- Pittman, H. 2003. Reconsidering the trouvaille de la statuette d’or. In: Miller, N.F. and Abdi, K. (eds.) *Yeki Bud, Yeki Nabud: Essays on the Archaeology of Iran in Honor of William M. Sumner*. Cotsen Institute of Archaeology at UCLA, Los Angeles, 176–191.
- . 2013. Eastern Iran in the Early Bronze Age. In: Potts, d.T. (ed.) *The Oxford handbook of ancient Iran*. Oxford: Oxford

- University Press, 304–324.
- Potts, D.T. 1999. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*. Cambridge: Cambridge University Press.
- . 2011. Equus Asinus in Highland Iran: Evidence Old and New. In: Conard, N.J., Drechsler, P. and Morales, A. (eds.) *Between Sand and Sea. The Archaeology and Human Ecology of Southwestern Asia. Festschrift in Honor of Hans-Peter Uerpmann*. Tübinger Monographien zur Urgeschichte. Kerns Verlag, Tuebingen, 167–176.
- Prange, M., Götze, H.-J., Hauptmann, A. and Weisgerber, G. 1999. Is Oman the ancient Magan? Analytical studies of copper from Oman. In: S.M.M. Young, A.M. Pollard, P. Budd, and R.A. Ixer (eds.) *Metals in Antiquity*, 187–192. British Archaeological Reports International Series 792. Archaeopress, Oxford.
- Rafiei Alavi, B. 2012. Ein Hinweis auf die Herstellungsmethode eines Dolchtyps aus Haft Tappeh. In *Contributions on history and culture of Elam and its neighboring regions*, edited by Behzad Mofidi Nasrabadi, 55–160. *Elamica* 2. Franzbecker, Hildesheim [u.a.].
- . 2015. *Archäologische Untersuchungen der Metallartefakte aus Haft Tappeh, Iran*. Goethe University Frankfurt, Frankfurt.
- Rashid, S.A. 1983. *Gründungsfiguren im Iraq*. München: C.H. Beck.
- Rehren, T., Boscher, L. and Pernicka, E. 2012. Large Scale Smelting of Speiss and Arsenical Copper at Early Bronze Age Arisman, Iran. *Journal of Archaeological Science* 39/6: 1717–1727. doi:10.1016/j.jas.2012.01.009.
- Reiter, K. 1997. *Die Metalle im Alten Orient unter besonderer Berücksichtigung altbabylonischer Quellen*. Münster: Ugarit-Verlag.
- Roux, V., Mille, B. and Pelegrin, J. 2013. Innovations céramiques, métallurgiques et lithiques au Chalcolithique: discontinuités techniques et sociales. In: *Transitions, ruptures et continuité en préhistoire = Transitions, rupture and continuity in prehistory: XXVIIe congrès préhistorique de France, Bordeaux-Les Eyzies, 31 mai – 5 juin 2010*, edited by Jacques Jaubert, Nathalie Fourment and Pascal Depaepe, 61–73. Congrès préhistorique de France 27. Société préhistorique française, Paris.
- Sallaberger, W. 2013. On silver in the Mesopotamian textual record of the third millennium: its value and its internal circulation. Lecture, German Archaeological Institute Research Cluster in Ibiza, April 5.
- Shishegar, A. 2015. *Aramgah-ye do banu-ye ilami. Az chandan-e shah-e Shutur-nahuntepesar-e Indada. Dore ilam-e no, marhale 3B (hodud 585 ta 539 p. m.); Tomb of the two Elamite princesses of the house of King Shutur-Nahunte son of Indada. Neo-Elamite period, Phase IIIB (ca. 585–539 B.C.)*. Iranian Center for Archaeological Research, Tehran.
- Spycket, A. 1981. *La Statuaire du Proche-Orient Ancien*. Leiden – Köln: E.J. Brill.
- . 1992. *Les figurines de Suse. Volume I – Les figurines humaines, IVe-IIe Millénaires Av. J.-C.* Mémoires de la Délégation Archéologique en Iran 52. Paris: Gabalda.
- Steiniger, D. 2011. Excavations in the slagheaps in Arisman. In: Vatandoust, A., Parzinger, H. and Helwing, B. (eds.) *Early Mining and Metallurgy on the Western Central Iranian Plateau. Report on the First Five Years of Research of the Joint Iranian-German Research Project*. Archäologie in Iran und Turan 9. Philipp von Zabern, Mainz am Rhein, 69–99.
- Stöllner, T. 2004. Prähistorischer und antiker Erzbergbau in Iran. In: Stöllner, T., Slotta, R. and Vatandoust, A. (eds.) *Persiens antike Pracht*. Deutsches Bergbau-Museum, Bochum, 44–63.
- . 2014. Methods of Mining Archaeology (Montanarchaeologie). In: Roberts, B.W. and Thornton, C.P. (eds.)

- Archaeometallurgy in Global Perspective*. New York: Springer, 133–160.
- Stöllner, T., Mireskandari, M., Roustaie, K. et al. 2011. Mining Archaeology in Iran – Investigations at Vesnave. In: Vatandoust, A., Parzinger, H. and Helwing, B. (eds.) *Early Mining and Metallurgy on the Western Central Iranian Plateau. Report on the First Five Years of Research of the Joint Iranian-German Research Project*. Archäologie in Iran und Turan 9. Philipp von Zabern, Mainz am Rhein, 535–608.
- Stolper, M.W. 1984. *Texts from Tall-i Malyan*. Occasional publications of the Babylonian Fund 6. Distributed by the Babylonian Fund of the University Museum, Philadelphia, PA.
- Strommenger, E. 1962. *Fünf Jahrtausende Mesopotamien. Die Kunst von den Anfängen um 5000 v. Chr. bis zu Alexander dem Großen*. Hirmer Verlag, München.
- Tallon, F. 1987. *Métallurgie Susienne I. De la fondation de Suse au XVIIIe avant J.-C.* Notes et Documents des Musées de France 15. Editions de la Réunion des musées nationaux, Paris.
- Tallon, F., Hurtel, L. and Drilhon, F. 1989. Un aspect de la métallurgie du cuivre à Suse. La petite statuaire du IIe millénaire avant J.-C. *Iranica Antiqua* 24: 121–158.
- Thomalsky, J., Bräutigam, B., Karaucak, M. and Kraus, S. 2013. Early Mining and Metal Production in Afghanistan: The First Year of Investigations. *Archäologische Mitteilungen aus Iran und Turan* 45: 199–230.
- Thornton, C.P. 2009. The Chalcolithic and Early Bronze Age metallurgy of Tepe Hissar, Northeast Iran: A challenge to the “Levantine paradigm.” PhD, University of Pennsylvania, Philadelphia.
- . 2014. The Emergence of Complex Metallurgy on the Iranian Plateau. In: Roberts, B.W. and Thornton, C.P. (eds.) *Archaeometallurgy in Global Perspective*. New York: Springer, 665–696.
- Thornton, C.P., Lamberg-Karlovsky, C.C., Liezers, M. and Young, S.M.M. 2002. On Pins and Needles: Tracing the Evolution of Copper-Base Alloying at Tepe Yahya, Iran, via ICP-MS Analysis of Common-Place Items. *Journal of Archaeological Science* 29/12: 1451–1460.
- . 2005. Stech and Pigott Revisited: New Evidence Concerning the Origins of Tin Bronze in the Light of Chemical and Metallographic Analyses of the Metal Artefacts from Tepe Yahya, Iran. In: H. Kars and E. Burke (eds.) *Proceedings of the 33rd International Symposium on Archaeometry, 22–26 April 2002, Amsterdam*. Geoarchaeological and Bioarchaeological Studies. Vrije Universiteit, Amsterdam.
- Vatandoust, A., Parzinger, H. and Helwing, B. (eds.) 2011. *Early Mining and Metallurgy on the Western Central Iranian Plateau. Report on the First Five Years of Research of the Joint Iranian-German Research Project*. Archäologie in Iran und Turan 9. Philipp von Zabern, Mainz am Rhein.
- Vidale, M., Craig, O., Desset, F., Guida, G., Bianchetti, P., Sidoti, G., Mariottini, M. and Battistella, E. 2012. A Chlorite Container Found on the Surface of Shahdad (Kerman, Iran) and Its Cosmetic Content. *Iran* 50: 27–44.
- Weisgerber, G. and Willies, L. 2000. The use of fire in prehistoric and ancient mining: firesetting. *Paléorient* 26(2): 131–149.
- Wertime, T.A. 1967. A Metallurgical Expedition Through the Persian Desert. In Caldwell, J.R. (ed.) *Investigations at Tal-i-Iblis*. Illinois State Museum Reports. Illinois State Museum, Springfield, Illinois, 327–339.

CHAPTER EIGHT

The peoples of Elam

—♦—
Ran Zadok

Elam¹ consisted of two regions, viz. the highland occupying at least the southwestern part of the Iranian plateau, and the plain of Susiana. The territorial extent of the former was not constant. One may speak of Elam *stricto sensu* which consisted of what was later named Persis (modern Fars) and Greater Elam (see below). On the other hand, Susiana (modern Khuzestan) is a well-defined region. It is the geographical continuation of the Mesopotamian alluvium. Susiana is adjacent to the Sealand of Babylonia and its cultural and ethnic character have always been influenced by its Mesopotamian neighbour. Elam *lato sensu* had a basically confederative political organization.²

The Elamites are recorded both in Elamite and non-Elamite sources from the second half of the 3rd millennium through the second third of the 1st millennium BC, a period of nearly 2,000 years. Moreover, the Elamite onomasticon is documented during a period of no less than 2,500 years, viz. from the middle of the 3rd millennium BC through the first half of the 1st century AD. Since there are very few texts in Elamite before the middle of the 2nd millennium BC, all the early Elamite names are recorded in Sumerian and Akkadian sources from Susiana. “Elamite” in practical terms means the dialects written in cuneiform, as the Elamite hieroglyphs (from the earliest period) are yet undeciphered. Elamite has four chronological phases (“dialects”), viz. Old, Middle, Neo and Royal Achaemenid (OE, ME, NE and RAE, respectively).

Elamites inhabited a vast territory. Hence their language must have had a considerable regional diversification, but hardly any diatopic dialectal information is available. The documentation from the various phases is very uneven. OE has only two more or less intelligible texts (a treaty and a royal inscription, Farber 1974). In addition, there are some OE words (mostly referring to officials, craftsmen, realia, legal terms and peculiar Elamite numinous notions) in early Akkadian sources from Susa, where rare instances of Elamite formulae and epithets occur. Contrary to the scant OE material, which is almost exclusively from Susa, the richer ME corpus has a wider geographical distribution. The relatively numerous NE materials are diverse and have a wide geographical distribution. RAE has the

richest documentation, the widest geographical distribution and is the most intelligible “dialect”. Most of the toponyms are listed and discussed in Vallat 1993. Elamite names are recorded in sources from Mesopotamia, especially in Ur III documents, where the Elamites were the most frequently mentioned non-Semitic foreign group; the same is true of the Old-Babylonian period. The sources from Susiana where the population was mixed, viz. Elamite and Semitic, also contain many Semitic (Akkadian, Amorite) and hybrid (Semitic-Elamite) names. The latter reflect the Elamite-Akkadian cultural interaction there. The Semites seem to have been dominant in early Susiana, as all the Susians mentioned in Sargonic texts bore Semitic names,³ and most names from OB Susa are Semitic. The percentage of the Semitic names there is much lower than that of the Elamite ones in the later (ME and NE) onomastic documentation, which contains some Kassite names as well. The onomasticon of NE and RAE reflects the intensive Iranian penetration into Elam.

Apart from “nuclear” Elam in Fars and Khuzestan, ELAM (NIM) prefixed numerous entities in the vast territory of the central Zagros and its piedmont (excluding its northwestern section with Gutium and Lullubum), notably Simaški, Sapum, Sigriš, Kimaš and Hu’urti. However, it is impossible to prove that the few individuals associated with this vast territory (altogether 64 regions) were ethnic Elamites, as most of their names are obscure and inexplicable in Elamite terms. One hardly expects ethnolinguistic unity in the central Zagros and east of it, with many almost inaccessible mountainous regions.

As regards Greater Elam during the Ur III period, ELAM defined no less than 38 regions (a-k’ and 4 below, proceeding roughly from southeast to northwest, refs. are to Edzard and Farber 1974, s.vv., unless otherwise indicated):

a. Anšan, b. Huhnuri, c. Giša, d. Adamšah (see Civil 1998), e. Susa, f. Iabrat (in Rāši in the Babylonian-Susian frontier), g. Arawa, h. Simaški and i. Sapum. “Nuclear” Elam consisted of at least a-e, while h, i and presumably j. Marhaši (see below) bordered on it.

Of the following regions, even the relative location is not known; at best, they are vaguely associated with other toponyms. They are arranged by frequency of occurrences (in descending order; s-c’ occur only once each):

k. Zaul, l. Sium, m. Pugar, n. Taplala, o. Ulum(ma),⁴ p. Hutum, q. Siri (add ELAM Si-ri^{ki}, Sigrist and Ozaki 2013: 207:9), r. Urri, s. Barbarranamba (or Parparrahupa), t. Girkinam, u. Itnigi (or Anigi), v. Danhili (cf. Waetzoldt 1975: 272), w. Gili (MVN 9 138:16), x. Hub/pum (is lú-Hu-bi-um^{ki}, which refers to Nu-nu, Hilgert 1998 263:1, a gentilic thereof?), y. Sitinrupum, z. Aš-gi₄, a’. Hu-pu-la^{ki}, b’. Hu-ú-šà-um-tum^{ki},⁵ c’. DI-um^{ki} and d’. E-ba-al.⁶

The following nine regions (e’-j’) did not belong to “nuclear” Elam, but were located in the northwestern Iranian plateau and its piedmont:

e’. Harši, f’. Kimaš, g’. Hu’urti (both generally juxtaposed, probably also not far from e’, for the location of Kimaš on the Iranian plateau rather than the piedmont of the Zagros east of Nuzi see Potts 2010: 248f.), h’. Mah(i)li/Manhili (Owen 1981: 255; FLP 1980: 15; ELAM Ma-an-

hi-li^{ki}: Perlov and Saveliev 2014 146:r.10), i'. Gizili (also Sargonic, Edzard, Farber and Sollberger 1977: 61), j'. Duh-duh-li^{ki} or Duh-du-li^{ki}⁷ (presumably in the far northwest, but perhaps southeast of Šašru as the latter, poss. modern Šemšara, is not defined as ELAM) and k'. Zurbati.

Six regions are not preceded by ELAM, but there is good reason for locating them somewhere in the Iranian Plateau or its piedmont (refs. are to Edzard and Farber 1974, s.vv., unless otherwise indicated):

l'. Zidanu (Zi-da-ni-um is an Akkadian gentilic > Zi-ti-an) is perhaps identical with OB Zi-id-na from Susa (Vallat 1993: 310), m'. Daba (preceded by a doubtful ELAM, Edzard and Farber 1974: 148, bottom), n'. Iapru is mentioned together with b, o'. Garnene, p'. Iab/pib/pum and q'. Šazibi/Šaziga.⁸

Šū-Sîn reports (Kutscher 1989: 74–75, 89: Statue I, i:14–33) that he was confronted⁹ (in 2031–2030 BC) by the SU-people (= Simaškians) of the lands of 1. Zapšali, which extends from the border of Anšan in the south to the Upper Sea (presumably the Caspian, see Kutscher 1989: 90, 98–99, cf. Vallat 1993: cxiv and Potts 2010: 251), 2. Iapulmat, 3. 'x'-[x-x-a]m^{ki}, 4. Sigriš (preceded by ELAM in some Ur III sources), 5. Ālum-iddatum, 6. Garta/Karda, 7. Azahar (prob. = Zahara with a-, Sargonic Zahara is mentioned together with Elam, Edzard, Farber and Sollberger 1977: 193), 8. Pulma,¹⁰ 9. Nušušmar, 10. Nušganelum, 11. Šišturtum, 12. Arahir, 13. Šatilu and 14. Tirmium (followed by a damaged passage).

The same ruler claims (Kutscher 1989: 83, 91–92: Statue II, viii:14–27) that he destroyed the land of Simaški (SU-people of Statue I). This statement is followed by the enumeration of 1. Zapšali, 4. Sigriš, 2. Iapulmat, 5. Ālum-iddatum, 6. Garta/Karda and 13. Šatilu (explicitly subsumed as “six lands”). They are followed by 7. Azahar, 8. Pulma, 9. Nušušmar and 10. [Nušganelum?]. Then there is a lacuna of c. 12 lines. On the same statue (Kutscher 1989: 84–86, 92, ix:33–xi:30) the rulers (sg. ensi) of the following lands are enumerated: In-da-su of 1. Zapšali, Ti-ti of 9. Nušušmar, S[a-a]m-ri of 15. [x]-'x'-li-[x]^{ki}, Nu-[x]-li of 5. Ālum-iddatum, B/Pu-un-ì-lí of 4. Sigriš, Ba-ri-hi-za of 12. Arahir, Wa-bur-tum of 16. [Lu?]-lu-bi-im^[ki], Ne-ni-íp-zu of 11. Šišturtum, Ti-ru-bi-ú of 10. Nušganelum, 'x'-am-ti of 6. Garta and Šul-gá-at of 2. Iapulmat. The Ur III scribe considered all these regions as Simaškian, led by Zapšali. Apart from Indasu, the ruler of Zapšali, who was the chief rebel, the rulers of 4, 5, 9, 12, 15 and 16 are classified as six prisoners, whereas those of 2, 6, 10 and 11 are referred to as four prisoners. In-da-su is homonymous with In-da-aš-šu from OB Šušarra (Eidem and Laessoe 2001, *passim*). Šul-gá-at is homonymous with later (Ur III) Šul-gá-a-at of 17. Zi-da-ah-ri^{ki} (once preceded by lú-SU, Edzard and Farber 1974: 244 and Hilgert 2003: 466a; another individual from there bore the Semitic name -lí-ší-lí, Tohrú 2002 108:r.1). The region of 18. Husan, like 19. Gu-ni-la-ha^{ki} and 20. Hu-zi-x^{ki}? (all Sargonic, see below), might have also been located on the Iranian plateau or near it. Simaški extended from Fars much to the north, presumably as far as the

Caspian Sea; a huge territory with many almost inaccessible mountainous regions and valley systems where one hardly expects ethnolinguistic unity.

In short, Greater Elam stretched over all of the western part of the Iranian Plateau and its piedmont, except for its northernmost section (notably Gutium). This vast area was ethnically heterogeneous with a discernible Hurrian element in the northern section of the piedmont. A presentation of the remaining onomastic material (non-Hurrian; Semitic and Sumerian names are left out), as far as it can be associated with the above-mentioned regions, may be of interest.

The names of the 60 Simashkians (phonetic or *lú-SU*, see Steinkeller 1988: 197–202; 1990; Civil 1996) are mostly atypical (e.g. *Gu-du*, *lú-Ši-ʾgi-ri-šum*^{<ki>}, Owen and Wasilewska 2000 37:11), devoid of any parallels with Semitic (due to Mesopotamian cultural influence). Their minority (nine) are Elamite or with Elamite connexions; several are (quasi-)homonymous with local toponyms (see Zadok 1991: 228–229 and add *Šu-tu-un-gu*, messenger of *Ki-ir-na-mi* = *Kir-na-me*, *Gu-ri-na-me lú-SU*, from *Puzriš-Dagan*, 42 *Šulgi*, Sigrist 1995: 149, 5). Regarding *Gu-un-da* (Englund 2004: 37, 42: 1, 2) and *Gu-ú-ud/tú* (Sauren 1978 239:5, see Owen 1994: 18–19, n. 7) from *Hurti*, the former may be based on *kunt-* which is extant in names from OB Susa on the one hand and MB Nuzi on the other (Gelb, MacRae and Purves 1943: 230a, 321a and Zadok 1983: 112–113, 117; 2002: 47 *ad Hurr. kuntari*).

Duchene (1986: 68) points out that *Pašime* is never preceded by ELAM (cf. ELAM *Hu-hu-nu-ri*^{ki} *ù Pa-šim-e*^{ki}, ITT 5 8212:5, where ELAM refers only to the former) and therefore should be placed in Susiana. However, several Ur III references to Susa are preceded by ELAM, cf. ELAM *Su-sín-na*^{ki}-*me* (Edzard and Farber 1974: 176) and ELAM *Susin*^{ki} (SET 187:9). *Pašime* is now identified with Tall Abū Šīja north of Amara near the Iraqi-Iranian border, 100 km west of Susa (see Hussein et al. 2010), that is, in the frontier of Babylonia and Susiana (like *Rāši*). Both individuals from there, who are recorded in Ur III sources, bore Semitic names (cf. Edzard and Farber 1974: 27).

The limited onomasticon of *Marhaši* (46 individuals, see Zadok 1993: 222–224, a variant of *Ar-bi-lu-uk-bi* is *Ar-pi-lu-uk-bi*, Sharlach 2004: 28: MLC 36:6.8), another region defined as ELAM, is mostly unexplained. Very few names resemble Elamite anthroponyms (cf. Zadok 1991: 229). Connections with the Kassite and Hurrian onomastica are rather vague. The case for locating *Marhaši* in the southeastern part of the Iranian Plateau is strong. Steinkeller (1982: 263) regards *Marhaši* as an intermediary between Elam and Meluhha in the east. Potts (2005) suggests a specific location within this range in southeastern Iran, namely, the Jiroft culture. A location in Margiana (advocated by Francfort and Tremblay 2010) is based on an alleged affinity of the late form *Marhuš* with Old Persian *Marguš*, and would thus extend the geographical horizon of the early Mesopotamian sources to almost incredible dimensions. In short, *Marhaši* is not to be sought far beyond Elam (see Zadok 2013: 409 with lit.).

Only half of the 18 recorded anthroponyms from Greater Elam (outside the “nuclear” one)

resemble Elamite forms (see Zadok 1991: 229–230):

Hu-un-hi-li (from Kimash), Hu-un-ur₅-ti and Hu-ba-mer-si-ni from Hu'urti as well as Hu(-ul)-li/lí-par(-ra, see Notizia 2010, 2011) and Še-il-ha from Duhduhli, Hu-un-ki-ib-ri from Ulli, In-da-da-bi from Iapipum and Hu-un-da-ah-še-er from Husan.

Pre-Sargonic texts have almost no Elamite names. All four Susians mentioned in Sargonic texts bear Semitic names (cf. Edzard, Farber and Sollberger 1977: 154–155). The same applies to Ik-ru-ub-É-a son of I-ki-lum a-bi ^{uru}ELAM^{ki} in an inscription of Manishtushu. On the other hand, rulers of Elam bear non-Semitic, mostly Elamite, names, viz. Sa-pir₆-si-mu-ut, Hi-si-ip-ra-si-ni and Lu-uh-iš-an (cf. Edzard, Farber and Sollberger 1977: 44–45), Si-im-hu-zi, the ensí of Huhnuri (RTC 238:3, cf. Edzard, Farber and Sollberger 1977: 73), late Sargonic Puzur₄-^dInšušinak(MÛŠ.EREN) son of Šim-bi-iš-hu-uk king of Awan (André and Salvini 1989: 65, pl. VI: Sb 156//149:2–6, Elamite paternal name), Hi-da-rí-da-x ensí of Gu-ni-la-ha^{ki} and Zi-na ensí of Hu-zi-x^{ki?} (Edzard, Farber and Sollberger 1977: 64, 75).

There is a sizable dossier of individuals who are mentioned in Old Akkadian documents found in Susa, and datable to the Sargonic period and slightly later (MDP 14 1–85). Most individuals bore Akkadian, Akkadianized and atypical names, but there are also a fair number of non-Semitic (over 20) notably Elamite anthroponyms. The Elamite deity ^dNa-ru-ti is recorded along with Man-za-ti (MDP 14 74), which was popular in Susiana, and there is some reason to believe that Hu-um-ba-a[n?] (MDP 14 3, r.i:9) refers to the prominent Elamite god Humban. Moreover, an anonymous Elamite functionary is recorded (MDP 14 9:11). Apart from this dossier, an administrative list of personnel from Susa (MDP 24 384) contains mostly Elamite names. Akkadian and Elamite names as well as, perhaps, an Amorite anthroponym (Ar-sa-^dDa-ga-an, cf. Lambert 1991: 56) occur in other Old Akkadian texts from Susa (MDP 28 523–525). Apart from the Elamite deities mentioned above, the Mesopotamian deities l-a-ba₄, ^dŠu-nir (< Bēlat Šuhnir, juxtaposed in MDP 14 51 *in fine* and MDP 14 71, iv: 7–8, for the latter cf. Hilgert 2012–2013: 263) and Ningirsu (MDP 14 70) were worshipped in Susiana. More Mesopotamian deities appear as theophorous elements of Akkadian and Sumerian anthroponyms:

Ea, Enki, Enlil, Erra, Adad, Šin/Nannar, Šamaš, Nergal, Šulpae, Ištar, Girra, Bau, Kūbu, Ninhursaga and Nisaba. Many of them recur in the later anthroponymy of OB Susa. Evidence for cultural interaction is negligible: there is only one hybrid (Elamite-Akkadian) name (Su-kir-a-bí, MDP 14 6). This early documentation group has connections with the Trans-Tigridian region of Mesopotamia.

An anonymous Marhashite (Ba-ra-ah-ší-ù) is recorded in MDP 14 23:r.2. The mixture of Akkadian, Elamite and atypical names, as well as the cult of the Elamite deities, combined with the geographical connection of Susiana with the Trans-Tigridian and Diyala regions located on the way from Mesopotamia to Susiana, prove that the Old Akkadian corpus from

Susa basically refers to the local population rather than to the Mesopotamian periphery. Moreover, this corpus consists mainly of administrative documents, thereby supplying a relatively balanced coverage of different layers of the society; in contrast to legal documents which generally refer to a certain circle of friends, colleagues and partners or to a restricted social network.

Scholars argue that the Old Akkadian economic documents from Susa refer to a colony of Akkadian settlers, who were brought by the conquerors (Foster 1993 and [Sallaberger and] Westenholz 1999). However, it should be remembered that the Semitic presence in Susiana is a *longue durée* phenomenon (Vallat [1980: 3] is of the opinion that the majority of Susiana's inhabitants were Semites). In addition, ancient polities were not fully bounded but rather had shifting and porous frontiers constituted by irregular fringes of the desert (cf. Lattimore 1989). This model of interaction can be applied not only to the fringe of a desert but to any geomorphological configurations, such as mountainous regions. Ambiguous boundaries are a source of contention: polities like Pashime, Yamutbal and Uruaz often changed hands. This is not to deny that archives written by Sumero-Akkadian scribes can indeed potentially be somewhat "Mesopotamian biased".

It can be concluded that Akkadian-speaking people were part of the local scene of Susiana as early as the Sargonic period and constituted a significant segment of the population there. Moreover, there is evidence for continuity of their presence well into the OB period (the seemingly different pantheon may be due to later developments which are not exclusively external, see below).

A treaty between Narām-Sîn and an Elamite king (MDP 11 2–11 = EKI 2 = Hinz 1967: 91–93) contains a list of at least 32 deities (below they are preceded by numbers according to their enumeration in the list), mostly Elamite, as well as a few Mesopotamian ones, such as 3. ^dA-ba₄ (Ilaba, see Hinz and Koch 1987: 751), Išhara 28. (^dÁš-ha-ra), 15. Ninurta and 18. Ninkarak, as well as 17. Mazziat (^dMa-zi-a[t]). The latter was popular in Susiana (cf. ^dMa-za-at of Pi-ša-an-ne, MDP 28 441:22–23, and Vallat 1993: 221). Like 6. ^dNIN.MÛŠ.EREN = Inšušinak (see Hinz and Koch 1987: 761). Several of these Elamite deities are later contained as theophorous elements in anthroponyms: 1. ^dPí-ni-ki[r], 2. ^dHu-ba-an, 7. ^dSi-mu-ut, 14. [^d]Hu-ut-ra-an, 26. ^dKir-wa-si-ir, 5. ^dNa-hi-ti, 19. ^dNa-ru_x-dè, 4. ^dZí-it and 16. [^dS]i-a-šum (cf. Zadok 1984, s.vv.). Discernible compound theonyms are 22. ^dRu-hu-iš-na, 23. ^dRu-hu-sa-[ak] (juxtaposed, both with Ruhu-), 8. [^dS]i-ir-na-[b]í-ir (Sir-napir), 31. ^dSi-im-it-sa-ra-r[a]-a[r] (with Simt/Timpt-), and 20. ^dGu-[gu]-mu-uk-ti-ir (with -mukti-r). Two other theonyms which are just barely possible compounds are 27. ^dHu-ur-ba-ha-ir (cf. 13. [^d]Hu-ur-bi with Hinz and Koch 1987: 722) and perhaps 24. ^dNi-ar-z[i]-na. The remaining deities are apparently simplex forms:

9. [^dH]u-sa, 10. [^dU]g-gab-na, 11. [^dI]m-it-ki, 12. [^dT]ul-la-at, 21. ^dHu-um-qa-at, 25. ^dLa-àm-ba-ni, 29. ^dNi-tu-ti-ir, 30. ^dTi-ú-uk and 32. [^dS][u-si]-ib-ba. The principle behind the order of

the deities is not transparent. However, at least the initial trio represents a pair of important Elamite deities (female and male) and an important Akkadian god of the Sargonic period. Zit, “luck”, is listed fourth, not only because it presumably occupied a prominent place in the official pantheon, but also due to its necessary importance in the popular religion. Only two of the Mesopotamian deities are juxtaposed (17, 18), whereas the others are scattered. A resemblant pair of Elamite deities is juxtaposed (22, 23), but another resemblant pair is not (13, 27). The arrangement of the solar deity in fifth place and Simut in seventh conforms to their importance in the Elamite pantheon.

The toponymy which is recorded in texts from Sargonic Susa is mostly non-Semitic.

King Puzur-Inšušinak from Susa (a contemporary of Ur-Nammu, 2112–2095 BC, see André-Salvini 1992: 87 and 2006–2008) invokes in his inscription (MDP 14 9ff.) the Trans-Tigridian goddess ^dBa-la-at Te-èr-ra-ba-an (MDP 14 20, i:2', cf. Edzard, Farber and Sollberger 1977: 156, 159; Vallat 1993: 277). This is followed by a long list of places covering a vast territory, including Ki-maš^{ki} and ma-at^{ki} Hu-úr-tim^{ki} in the northwest part of the Iranian plateau (MDP 14 9ff., i:12, 15), as well as a reference to the king of Si-maš-gi^{ki} (v:10), and perhaps Gutium (Gu-tú^{ki}, ii:12).

The archive of Igi-buni son of A-at-ta was unearthed in Susa and is dated to the Ur III period. Out of the 61 individuals recorded in this archive (peruse the index of De Graef 2005: 159–161), no less than 42 = 68.85% bore Akkadian names, whereas only two (3.27% including the archive owner) had Elamite anthroponyms. The percentage of people with Mesopotamian names is even higher (46 = 75.4%) when one adds the Sumerian material (2 + 1 doubtful + 1 questionable hybrid Sumero-Akkadian names, i.e. 6.55%). The percentage of Elamites may be slightly elevated by adding several atypical names, which are explicable in Elamite terms. There are no more than ten individuals (16.39%) with atypical anthroponyms, and not all of these names are amenable to Elamite interpretation. One individual (1.63%) bore a doubtful Kassite name (Ga-an-da, cf. Kassite Gandaš?) and another one (1.63%) an unaffiliated non-Semitic anthroponym. No Amorites are recorded. Evidence for cultural interaction is negligible; there is only one hybrid (Akkado-Elamite) anthroponym, viz. Puzur-Šimut (1.63%). Filiations are rarely recorded and none of them are demonstrably mixed.

The deity NIN.MAR^{ki} was worshipped and the following theophorous elements, all Mesopotamian, are recorded:

Ilu, Ištar, Ea, Sîn, Erra, Sukkal, Išar, Kūbu, Mama, Damu, Šarru and Ṭaban. The last element (originally a river in the Diyala region) suggests a Trans-Tigridian connection.

Five of the six Susians mentioned in Ur III texts bore Semitic names, and the Mesopotamian deity Nin-hursag was worshipped there in Shulgi's time. Ki-na-mu-ša sukkal Susa (Sigrist 2005 272:2) is apparently non-Semitic. Two individuals bearing Elamite names from Adamšah (possibly modern Tepe Surkehgan near Shushtar in Susiana/Khuzestan), viz. Me-rí-iš and Û/U₁₈/U₁₉-ba-a, are mentioned. The name of A-b/pu-du sukkal Adamšah (Sigrist 2005 287:5)

has no onomastic parallels in Elamite, but that of Hu-un-da-hi-še-er from Anšan, who is recorded at Puzriš-Dagan on 13.X.44 Šulgi (Hilgert 1998 171:r.12), is unmistakably Elamite.

Many individuals without obvious geographical context, who were defined as ELAM (mainly in the so-called “messenger texts”), bore Sumerian and Semitic names (for their role in the Ur III state see Michalowski 2008). There were 24 individuals of the same category who had Elamite (pure or hybrid) and atypical names (all from Ur III, see Zadok 1991: 230, nos. 97–120; 1994: 40–43).

If we add the names of Elamite rulers and dignitaries mentioned in Ur III, OB, MB, NB, MA, NA and other sources, we shall enumerate altogether approximately 220 anthroponyms. The number of names borne by individuals who were not described as Elamites, but are explicable in Elamite terms, is much higher.

A sample of 169 individuals who are mentioned in early OB documents found in Susa (mostly administrative from the time of Atta-hušu, c. 1900 BC, MDP 10 1–126) reveals that 60 = 35.5% bore Akkadian (very few Akkadianized) names. The percentage of individuals with Elamite names (maximum 65 with various degrees of plausibility) is slightly higher (38.46%), but since many atypical and short names (34 = 20.11%) are explicable in Elamite terms (they are based on Elamite ‘hypocoristic roots’),¹¹ one may conclude that most of the individuals mentioned in early OB Susa were Elamites.¹² The material has a relatively broad geographical coverage; several individuals are from other settlements in Susiana. Apart from the sizable implicit (onomastic) evidence evaluated just above, there are also several explicit occurrences of ethnic groups: Simashkians are recorded in the settlement of Marzak (MDP 10 66), in addition to two other groups which are not attested elsewhere, viz. Samatians (Sa-ma-ti-ip, probably in Luristan), Saprians (Sa-ap-ri-i[p]), Hatans (Ha-ti-i[p]) (all anonymous). Apart from Elamite deities (including Inšušinak, the main god of Susa and Simut of Ruksinum; Ru-uk-si-nu recurs in MDP 55 26:20), the Mesopotamian deities Enki, Nannar, Nergal, Inanna, Ninegalla and Il(i)abrat were worshipped there (cf. MDP 10: 5, 7, 34, 97). More Mesopotamian deities appear as theophorous elements of Akkadian anthroponyms (Adad, Sîn/Nannar, Šamaš, Nergal, Nabûm, Girra, Bau, Il(i)abrat and Kūbu, peruse the index of MDP 10 75–79). Many of them recur in the later anthroponymy of OB Susa. Evidence for cultural interaction is negligible: there are only three hybrid (Akkadian-Elamite) theophorous names and just one mixed filiation.

An additional text group from early OB Susa (administrative documents in MDP 55) has 305 individuals (severely damaged names are left out; the classification of each group is with various degrees of plausibility). The largest group are the bearers of the Akkadian names, viz. 125 = 40.98%. The percentage of individuals with Elamite names (maximum 93) is lower (30.49%), but since (1) many atypical and short names (57 = 18.68%) are explicable in Elamite terms, and (2) the non-Semitic unexplained names (17 = 5.57%) may also be Elamite (the most likely candidate), one may conclude that most of the individuals mentioned in early OB Susa

were Elamites. In addition, there are nine individuals with Amorite names (2.95%). The material, which also includes cadastral documents, has a broad geographical coverage. There are some Akkadian toponyms.

A worshipper of Ninegalla is recorded in MDP 55 53. The following Mesopotamian deities appear as theophorous elements of Akkadian anthroponyms: Ilu, Ea, Enlil, Adad, Šîn/Nannar, Šamaš, Ištar, Nanâ, Bau, Mammītum, Nunu, Kaki, Išum, Amurru, Sukkal, Sigar and Kūbu (peruse the index of MDP 55 193–203). Many of them recur in the later anthroponymy of OB Susa. The occurrence of Ištarān is due to the presence of people from Dēr or its region (Dēr is recorded in MDP 55 81:3, cf. MDP 55 183 *ad loc.*). Evidence for cultural interaction is modest: there are only seven hybrid (Akkadian-Elamite) theophorous names (2.29%).

Slightly later within the OB period, we reach the peak of the documentation. The names of the rulers of OB Susa are Elamite, but most of the commoners there bore Akkadian names (see Lambert 1991: 55–56), some with mixed Akkadian-Elamite genealogies (bearers of Elamite names generally belong to the later generations, cf. Jalilvand Sadafi 2013: 356ff.). Commoners bearing Elamite names, as well as individuals with atypical anthroponyms (many explicable in Elamite terms), were a sizable minority at OB Susa (the preliminary estimate of 25%, according to Glassner 1991: 117, must be somewhat too high). The abundant sample contains almost no Amorite names.

In addition, there were very few Kassites in OB Susa. The fact that the river ordeal, which in the Old Babylonian period is mainly recorded in texts from Susa, became more common in Babylonia during the Kassite than in the preceding (Old Babylonian) period may point to an origin of the Kassites east of Babylonia, but is not conclusive evidence. This strengthens the case for the southern and central Zagros as the original abodes of the Kassites.

Only three individuals may have originated from Tilmun, since their names include the theophorous element Inzak. The hydronyms Atap Ki-ma-šī-i and Atap Šu-ba-ri (Vallat 1993: 332, 336) are named after people from Kimaš and Subartu, respectively, who were presumably settled in Susa as prisoners of war.

It seems that endogamy was the norm, but exceptions were not rare, seeing that there is modest evidence for intermarriage between the two groups. Most of the filiations (generally just two generations) are either purely Akkadian, or Akkadian with an atypical name. In the minority of cases, filiations are mixed (Akkadian-Elamite). A case in point is the four generations of a family with a house that included a chapel of the Mesopotamian goddess Ningal (De Meyer 1961). Cultural interaction took place, but does not seem to be intensive: the percentage of hybrid names is low.

Despite these coherent trends, there was no segregation. The members of both ethnic groups formed the Susa civil community¹³ and enjoyed an intensive socio-economic interaction. In one case, the judge was Elamite (In-zu-zu son of Ku-du-úr-^dNa-šu-úr, the only individual with a filiation in the deed), and the document contains an Elamite legal term. The

judge, who heads the list of witnesses, is followed by a commander with an Akkadian name, and then by Te-em-ti-pí-it-ra-haš, I-pi-zu-lu-uš, Ra-bi-bi (chamberlain), Pe-el-za, Ki-ri-ri, Šar-ilī and Si-mu-mu. The principal is Ea-gāmil, while the murdered person is I-ù-ú. Thus we have three Akkadian vs. four Elamite names (cf. De Meyer 2001: 31). Most of the scribes have Akkadian names and very few bear atypical ones. The scribe with the Elamite name I-g[i-hal]-ki (MDP 23 270:18) is an exception. Elamite titles were borne by individuals with Akkadian names as well.

Both parties in an unprovenanced deed, viz. In-zu-zu and Ku-uk!-^dŠà-ni-ip-GAL (son of Si-ni-^d[...]), have Elamite names, but all the witnesses (three) and the scribe bear Akkadian anthroponyms (Tammuz 2000, apparently late OB in view of the ductus). This is the only occurrence of Ku-uk!-^dŠà-ni-ip-GAL, who was a worshipper of Simut; but a homonymous, if not an identical individual is recorded in MDP 28 471:22, where he is followed by ÉRIN 10 (perhaps a decurion, according to Scheil, MDP 28 112 *ad loc.*; the same name recurs in MDP 28 540:3 without a title). The latter also witnessed the deed (listed after Šamaš and Inšušinak!). His name ends with a compound theonym (Šanip-riša?), which is identical with Sa-ni-ip-GAL (MDP 28 441:8, with s/š-interchange). The compound anthroponym and the context in MDP 28 515:r.5, where Sa-ni-ip-GAL is listed after Si-mu-ut, leaves no doubt that it is a deity. The scribe is homonymous with Mu-ha-du-um, one of the scribes of MDP 23 181:32. Thus the deed is very probably from Susa.

The material has a limited geographical coverage but contains many microtoponyms referring to fields and canals around Susa. Fortified areas (Akk. sg. *dimtu*, see Vallat 1993: 12–13 s.vv. AN.ZA.GAR- ...), such as -Abu-tāb, Ibni-Adad, -šarri, -ṭupšarri, eššetu, as well as Dimti ša Halteri, are mostly ephemeral. Most of the explicable toponyms and hydronyms are Akkadian. Only a minority are Elamite.

The numerous individuals mentioned in this rich documentation lived in Susa, apart from a very few who resided in its vicinity, or came from another region, like the “Šugaliens” (Šu-ù-ga-li-ip, MDP 28 446:8, cf. RAE Šugalli(-[...]), who might have originated from Persis [Vallat 1993: 262]).

Apart from Elamite deities (including Inšušinak, the main god of Susa and Simut), the Mesopotamian deities Ningal, Šamaš, Nergal and Inanna (^dINNIN),¹⁴ as well as Ninegalla (MDP 28 517:10) and Ereškigal (MDP 28 533:3), were worshipped at Susa. Priests of Annunītum and Erra (both bearing Akkadian names) are recorded in MDP 22 101:15, 20. People swore by the deities Inšušinak, Šamaš and Adad. Išme-karāb, Šazi and Kūbu were also invoked (see Scheil, MDP 24 19 *ad* MDP 24 339:11). Inšušinak, Šamaš (*passim*) and Il(i)abrat (MDP 24 330, the principal is I-bi-Il(i)abrat), as well as (rarely) Nergal, Ea (MDP 24 376:18–19) and Šara (MDP 24 331:28) acted as witnesses.

In addition to the local deities (In)šušinak (Šuši)¹⁵ and Išme-karāb, many Mesopotamian deities appear as theophorous elements in the abundant corpus of Akkadian anthroponyms

from OB Susa (peruse the indexes of MDP 22–24, 28):

Ilu, Adad, Enlil, Ea, Babu, Erra, Nergal, Igištu (or Pāilil), Išum, Ištar, Inanna, Annunītu, Šamaš, Šin, Nannar, Ningal, Nabium, Amurru, Išar, Kūbu, Il(i)abrat, Mamu, Nunu, Kakku, Sigar and Šarru. These theophorous elements appear in the Akkadian onomasticon from Susa as early as the Sargonic period. This find, combined with the fact that the Akkadian name-bearers were the largest group in the pertinent documentation from Susa during the pre-OB period, indicates that the “Akkadianization” of Susa did not start in the OB period, but rather much earlier. This differs from the opinion of Lambert (1991: 57–58), who suggested a lack of continuity based on the absence of deities popular in central Babylonia in both periods, such as Marduk and Zababa. Yet this argument only demonstrates that Susiana was influenced in the first place by the closer Babylonian periphery, rather than by the more remote central Babylonia. We witness here a general continuity of the ethno-linguistic situation in Susa, with a change confined to certain, rather insignificant, components of the pantheon, since the theophorous elements listed below are recorded in Susa only in the later OB period. The considerable increase in the number of the theophorous elements at that time is due mainly to the great surge in the documentation rather than a massive influx of new population. Lambert suggests that some people arrived at OB Susa from Sumer, presumably from the region around Umma and Nina, in view of the occurrence of the deities Šara and Nasī,¹⁶ who were popular only in and around these cultic centres. However, it should be remembered that only a handful of individuals bore names with these theophorous elements. The possibility that they descended from prisoners of war, who were brought by the Elamites after they had destroyed the Ur III state, cannot be excluded. The existence of a chapel of Ningal in a private house of an Akkadian-speaking family at Susa (cf. above) would point in the same direction, as this goddess was venerated at Ur.

Theophorous elements recorded only in OB Susa (not earlier; peruse the indexes of MDP 22–24, 28) are Anu, Bēlet-ilī, Dada, Damiqtum, Damkina, Dumuzi (possibly > Tuzi¹⁷), Gilgameš, Huluppu, Irrak, Kabta, Kittum, Kunuš-kadru, Kuzzalu, Lahmat, Lamassu, Lulu, Mugra(t), Ninazu, Nin-Isin(na), Padūm, Rimku, Šadūm, Šazi, Šērum and Šudda, as well as underworld deities such as Šubula and perhaps Isqan (~ Sumuqan/Šakkan?).

Many of the above-mentioned deities were worshipped in the Trans-Tigridian regions of Mesopotamia (notably on the Diyala River, and in Rashi), as well as the Sealand, which were adjacent to Susiana. It can be surmised that there was an incessant influx of people from these neighbouring regions to Susiana.

Elamites migrated also to Babylonia, and were politically involved in the adjacent kingdoms of Larsa and Eshnuna. Bilalama of Eshnuna, who was contemporaneous with Tan-Ruhurater of Elam, bore an Elamite name (see Saporetti 2002: 20–21, 61).

Out of the 18 individuals with linguistically classifiable names from Late OB Susa (De Graef 2007), 12 = 66.66% bore Akkadian and 6 = 33.33% Elamite names.

More than 650 economic tablets from the early MB period (c. 1450–1400 BC) were unearthed at Kapnak (modern Haft Tepe, 17 km southwest of Susa). Kapnak had connections not only with other regions of Elam, but also with Babylonia (cf. Glassner 1991: 111, 114).

Glassner (1991: 117) reports 55% bearers of Elamite names in Kapnak (Pirhi-Amurru and Ilibarna, Babylonians who did not reside in Kapnak, cf. Herrero 1976: 96f.: tablet 1:r.12; Herrero 1976: 98f.: tablet 3:7, are not taken into account) vs. 90% in Mālamīr (but see below). This is also the estimation of De Graef (2013: 275–276). However, there is a sizable group of names from Kapnak which resists any analysis. In addition, there are also individuals with Kassite, atypical and hybrid (Akkadian-Elamite) names.

The majority of the individuals mentioned in a small text group, which allegedly originates from Mālamīr (early MB, 16 texts, MDP 4 169–194, re-edited in MDP 22, see Stolper 1988), are non-Semitic, overwhelmingly Elamite (c. 80%). There are no more than two Kassite names, viz. A-ni-ki-la-an-di (see Scheil, MDP 22:144 *ad* MDP 22 132:2) and perhaps Šup-šu-pi, which is atypical but may have a Kassite base. Of the three scribes, one bore a doubtful Akkadian name; the other two had atypical anthroponyms. No more than eight individuals bore Akkadian or Akkadian-looking anthroponyms (e.g., Hu-ul-li-mi-šu, see CAD H: 228a, and Pu-su-ri-ri if it is based on *puzur*). Evidence for cultural interaction and assimilation are the five hybrid (Akkadian-Elamite) names and the mixed filiations, which are not rare in this limited sample. Despite the unproven provenience, the texts must originate from a site in Susiana or near it, in view of the fact that the parties swear by Inšušinak, and the divine witnesses are Šamaš and Ruhurater.

The later MB period has much less textual material. There is evidence for the presence of Semites in a town of Susiana at that time (cf. Brinkman 1986: 200). Some individuals in the rich later MB documentation from Nippur are defined as Elamites or bear Elamite anthroponyms (including hybrid names, see Zadok 1991: 230, nos. 138–142).

From the middle of the 2nd millennium BC onwards there is a surge in the number of ME royal inscriptions, with a wide geographical distribution across the country (e.g., Liyan = modern Bandar Bushehr and Dūr-Untaš = modern Chogha Zanbil). They supply pertinent information about the uppermost layers of the Elamite society. In addition, there are over 310 economic texts from Anshan (Tall-i Malyan). They are late ME or rather early NE (mostly from c. 1100–1000 BC according to Steve 1992). The relatively numerous NE material is diverse and has a wide geographical distribution. A list of Susian deities and designations of Elamite classes of priests are recorded in a Neo-Assyrian royal inscription concerning Elam. There is evidence for the presence of a Babylonian community in 7th-century BC Hidali and Sumuntunaš (see Henkelman 2003: 185, n. 10).

The principality of Samati is to be sought in southwest Lurestan, north of Khuzestan, where NE inscriptions datable to the 6th century BC (roughly coeval with the Acropole texts from Susa) were either found in the Kalmākarra cave or are thought to originate from there.

Almost all the 27 different names contained in these inscriptions, and referring to 15 individuals, are explicable in Elamite terms with a very slight Iranian admixture (see Henkelman 2003: 205, 214–227, esp. 223, table 2.8 and 225, n. 156). Southwest Lurestan was populated by Kassites (*Kossaiōi*) as late as the beginning of the Hellenistic period. It is therefore noteworthy that no ascertained Kassite names are recorded in this text group. However, since this minute prosopographic sample refers only to a particular circle of the local elite, one cannot reach definite conclusions regarding the ethno-linguistic composition of this region.

Most individuals mentioned in the relatively sparse Neo-Elamite material from Susa (“Acropole texts”, late 7th–second half of the 6th centuries BC, cf. Álvarez-Mon 2010: 206 with n. 87), are Elamites. Kassites, Babylonians and Arameo-Arabians can also be considered indigenous, as the population of Susiana contained a Semitic segment. The deity Iltarān of the eastern Babylonian city of Dēr, near the Elamite border, was worshipped in Susa, and there is evidence there of Babylonian religious-cultural influence (see Zadok 2011: 127–128). Another minority were Iranians – actually Persians (see Tavernier 2011). According to Henkelman (2003: 211–212), “Persians” in the Acropole texts are not necessarily an ethnic group as distinct from Elamites, but presumably are any people originating from Persis (Anshan). An example of a specific Iranian group in the Acropole texts is the Unsak-people (Henkelman 2003: 186).

The Persian tribes migrated first to eastern Elam, notably Anshan, where Elamite-Persian religious acculturation played an important role in their ethnogenesis (see Henkelman 2003: 188). They are first mentioned in Assyrian inscriptions from the Sargonid period, but they were probably present there much earlier. The abundant documentation from late Achaemenid Persepolis is from the final stages of this process: the fact that c. 90% of the c. 2000 named individuals from there bore Iranian names vs. less than 10% with Elamite anthroponyms (see Gershevitch 1969: 168, cf. Mayrhofer 1973: 306–310) strongly suggests a very advanced Iranianization of Persis by the late Achaemenid period. This conclusion is strengthened by the fact that RAE has not only the richest documentation (statistically outweighing all the earlier material), but also the widest geographical distribution. The abundant administrative documentation from Persepolis is written mostly in Elamite, following the indigenous scribal tradition of the region, but contains numerous Iranian (notably Old Persian) loanwords. Elamo-Persian linguistic interference was very intensive. The toponymy was gradually Iranianized, but a certain Elamite substrate has been preserved. The Elamites are the “unmarked” entity of the Persepolis corpus, while Persians are sometimes specified by tribes, for example, Maraphians, as well as Zampegir-Persians, in Achaemenid Hidali (see Henkelman 2003: 185, n. 10, 188, 213).

Global imperial needs, starting with the construction of imperial capitals and other mega-projects, necessitated massive movements of foreign workers to Persis and Susiana. During the late Achaemenid period, there is abundant evidence for the presence of foreign population

groups acting as workmen at Persepolis and in the rest of Persis. They are listed here (the size of the first five groups is clearly documented): Skudrians (basically from Thrace and neighbouring regions, see Henkelman and Stolper 2009), Lycians, Assyrians, Cappadocians and Babylonians (many acting as Aramaic scribes). There is mention also of Arabians (see Zadok 2011: 125 with n. 11), Egyptians, Nubians, Bactrians, Sogdians, Indians, Lydians, Phrygians and Greeks (“Ionians”); almost all the members of these groups are anonymous.

Late-Achaemenid Susa was inhabited not only by Elamites, Persians and Semites, but also had an Egyptian community which preserved its own customs (see Joannès 1984 and Abraham 1992).

Notes

- [1](#) Abbreviations of cuneiform text editions follow the *Chicago Assyrian Dictionary (CAD)*, unless indicated otherwise.
- [2](#) See [Sallaberger and] Westenholz 1999: 90 with n. 405, cf. Saporetti 2002: 296–297.
- [3](#) Cf. Edzard, Farber and Sollberger 1977: 154f.
- [4](#) Edzard and Farber 1974: 204 and ELAM $\dot{U}$ -lum-ma^{ki} (Garfinkle, Sauren and Van De Mieroop 2010 209:10), perhaps identical with $\dot{U}$ -li-me in a document from OB Susa (MDP 28 441:16).
- [5](#) Sigrist 2004 462, Garfinkle, Sauren and Van De Mieroop 2010 205:7 and Capitani 2003 26:r.4, respectively. For Ebal cf. Edzard and Farber 1974: 38.
- [6](#) See Neumann 2011: 13 *ad* pl. 3 after 116: 3, 4 and cf. D’Agostino and Pomponio 2002 235:r.5, respectively.
- [7](#) See Notizia 2010, 2011. Formerly lemmatized as *Duddul*. It is not homonymous with *Tuttul*.
- [8](#) Cf. Edzard and Farber 1974 as well as Owen 1981: 247ff., s.vv.; see Vallat 1985: 50f.
- [9](#) This rendering is fully acceptable despite damage to the artefact at this point of the inscription, (end of ii – beginning of iii), as typically, the inscription’s author accuses the enemy of opening hostilities.
- [10](#) This toponym is extant as a deity (Pi-ul-ma, MDP 28 533:10), which is contained as a theophorous element in several Akkadian anthroponyms from OB Susa: ^dPu-ul-ma-um-mi-la-ab-bi (MDP 23 237:14) and Warad(R)-pu-ul-ma (MDP 23 213:r.5; MDP 23 255:4).
- [11](#) Cf. Zadok 1983: 98–99, where a minority of such names may be based on Semitic forms.
- [12](#) The sample includes at least six unexplained names (3.44%) and perhaps one Kassite anthroponym (0.57%), viz. Ha-aš-mu-r[i] (MDP 10 101:5, cf. perhaps Hašmar and Hašimur, Balkan 1954: 94).
- [13](#) See Yusifov 1968: 90ff., 166 and *passim*; cf., for example, MDP 23 395, where a female free citizen of Susa (*mārat Šuši*) is mentioned.
- [14](#) MDP 28 533: 4, 18. ^dINNIN was also worshipped in Dūr-A-ga-ti and possibly in Ga-an-za-ra according to the same document.
- [15](#) E.g., Šu-šu-li-wi-ir, EN-šu-ú-ši (see Scheil, MDP 22: 105 *ad* MDP 22 91:15 and MDP 22: 91 *ad* MDP 22 77:5), A-ni-ih-Šu-ši (MDP 18 205 = MDP 22 45:37).
- [16](#) Extant in Pù-zur^d-Na-sí (MDP 28 479:11) and Puzur-Na-sí-it (see Scheil, MDP 28 84 *ad* MDP 28 439:r.2). The latter

form must be secondary: the feminine suffix *-t* was inserted by the Akkadian-speaking worshippers because it was a goddess.

[17](#) ^{fd}Tu-zi-dam-qa-at (MDP 23 288:10, see Scheil, MDP 22 69 *ad* MDP 22 58:3 and cf. Krebernik 2014: 249).

References

- Abraham, K. 1992. The Dowry Clause in Marriage from the First Millennium B.C.E. In: Charpin, D. and Joannès, F. (eds.) *La circulation des biens, des personnes et des idées dans le Proche-Orient ancien, Actes de la XXXVIII RAI (Paris, 8–10 Juillet 1991)*. Paris: Recherches sur les civilisations, 311–320.
- André, B. and Salvini, M. 1989. Réflexions sur Puzur-Inšušinak. *Iranica Antiqua* 24: 53–78.
- Álvarez-Mon, J. 2010. *The Arjān Tomb: At the Crossroads of the Elamite and the Persian Empires*, Acta Iranica 49. Leuven: Peeters.
- André-Salvini, B. 1992. The Monuments of Puzur-Inšušinak. In: Harper, P.O., Aruz, J. and Tallon, F. (eds.) *The Royal City of Susa: Ancient Near Eastern Treasures in the Louvre*. New York: The Metropolitan Museum of Art, 87–91, 261–265.
- . 2006–2008. Puzur-Inšušinak. *Reallexikon der Assyriologie* 11: 129–131.
- Balkan, K. 1954. *Kassitenstudien*, American Oriental Series 37. New Haven, CT: American Oriental Society.
- Brinkman, J.A. 1986. The Elamite-Babylonian Frontier in the Neo-Elamite Period, 750–625 B.C. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta historiae elamicae. Mélanges offerts à M.-J. Steve*. Paris: Recherches sur les civilisations, 199–207.
- Capitani, M. 2003. *Girsu Messenger Texts in the British Museum*, Nisaba 3. Messina: Dipartimento di Scienze dell’Antichità dell’Università degli Studi di Messina.
- Civil, M. 1996. Sin-iddinam in Emar and SU.A = Šimaški. *Nouvelles Assyriologiques Brèves et Utilitaires* 1996/41: 36–37.
- . 1998. “Adamdun,” the Hippopotamus, and the Crocodile. *Journal of Cuneiform Studies* 50: 11–14.
- D’Agostino, F. and Pomponio, F. 2002. *Umma Messenger Texts in the British Museum, part one*, Nisaba 1. Messina: Dipartimento di Scienze dell’Antichità dell’Università degli Studi di Messina.
- De Graef, K. 2005. *Les archives d’Igibuni: les documents Ur III du Chantier B à Suse*, MDP 54. Ghent: University of Ghent.
- . 2007. Les textes de V récent du Chantier B à Suse (fin Sukkalmahat – ca. 1575–1530 av. notre ère). *Iranica Antiqua* 42: 41–59.
- . 2013. The Use of Akkadian in Iran. In: Potts, D.T. (ed.) *The Oxford handbook of ancient Iran*. Oxford: Oxford University Press, 263–282.
- De Meyer, L. 1961. Une famille susienne du temps des Sukkalmahhu. *Iranica Antiqua* 1: 8–19.
- . 2001. Un meurtre à Suse. In: van Soldt, W.H. et al. (eds.) *Veenhof Anniversary Volume. Studies Presented to Klaas R. Veenhof on the Occasion of His Sixty-Fifth Birthday*, Publications de l’Institut historique et archéologique néerlandais de Stamboul 89. Istanbul: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 31–38.
- Duchene, J. 1986. La localisation de Huhur. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta Historiae Elamicae. Mélanges offerts à M.-J. Steve*. Paris: Recherches sur les civilisations, 65–73.
- Edzard, D.O. and Farber, G. 1974. *Die Orts- und Gewässernamen der Zeit der 3. Dynastie von Ur*, Répertoire Géographique

- des Textes Cunéiformes 2. Wiesbaden: Reichert Verlag.
- Edzard, D.O., Farber, G. and Sollberger, E. 1977. *Die Orts- und Gewässernamen der prä-sargonischen und sargonischen Zeit*, Répertoire Géographique des Textes Cunéiformes 1. Wiesbaden: Reichert Verlag.
- Eidem, J. and Laessoe, J. 2001. *The Shemshara archives 1: The letters*, The Royal Danish Academy of Sciences and Letters, Historisk-fil. Skrifter 23. Copenhagen: Munksgaard.
- Englund, R.K. 2004. Banks in Banning. In: Waetzoldt, H. (ed.) *Von Sumer nach Ebla und zurück. Festschrift Giovanni Pettinato zum 27. September 1999 gewidmet von Freunden, Kollegen und Schülern*, Heidelberger Studien zum Alten Orient 9. Heidelberg: Heidelberger Orientverlag, 35–44.
- Farber, W. 1974. Eine elamische Inschrift aus der 1. Hälfte des 2. Jahrtausends. *Zeitschrift für Assyriologie* 64: 74–86.
- Foster, B.R. 1993. “International” Trade at Sargonic Susa (Susa in the Sargonic Period III). *Altorientalische Forschungen* 20: 59–68.
- Francfort, H.-P. and Tremblay, X. 2010. Marhaši et la civilisation de l’Oxus. *Iranica Antiqua* 45: 51–224.
- Garfinkle, S., Sauren, H. and Van De Mieroop, M. 2010. *Ur III Tablets from the Columbia University Libraries*. Cornell University Studies in Assyriology and Sumerology 16. Bethesda: CDL Press.
- Gelb, I.J., MacRae, A.A. and Purves, P.M. 1943. *Nuzi Personal Names*, Oriental Institute Publications 57. Chicago: Oriental Institute.
- Gershevitch, I. 1969. Amber at Persepolis. In: *Studia Classica et Orientalia Antonino Pagliaro Oblata* 2. Rome: Istituto di Glottologia, 167–251.
- Glassner, J.J. (with the collaboration of F. Grillot) 1991. Les textes de Haft Tépé, la Susiane et l’Elam au 2ième millenaire. In: De Meyer, L. and Gasche, H. (eds.) *Mésopotamie et Elam. Actes de la XXXVIème Rencontre Assyriologique Internationale (Ghent 10–14 July 1989)*, MHE, Occasional Publication 1. Ghent: University of Ghent, 109–126.
- Groneberg, B. 1980. *Die Orts- und Gewässernamen der altbabylonischen Zeit*, Répertoire Géographique des Textes Cunéiformes 3. Wiesbaden: Reichert Verlag.
- Henkelman, W.F.M. 2003. Persians, Medes and Elamites. Acculturation in the neo-Elamite period. In: Lanfranchi, G.B., Roaf, M. and Rollinger, R. (eds.) *Continuity of Empire(?): Assyria, Media, Persia*, History of the Ancient Near East/Monographs 5. Padova: S.a.r.g.o.n, 181–231.
- Henkelman, W.F.M. and Stolper, M.W. 2009. Ethnic Identity and Ethnic Labelling at Persepolis: the Case of the Skudrians. In: Briant, P. and Chauveau, M. (eds.) *Organisation des pouvoirs et contacts culturels dans les pays de l’empire achéménide. Actes du colloque organisé au Collège de France par la “Chaire d’histoire et civilisation du monde achéménide et de l’empire d’Alexandre” et le “Réseau international d’études et de recherches achéménides” (GDR 2538 CNRS)*, 9–10 novembre 2007, Persika 9. Paris: De Boccard, 271–329.
- Herrero, P. 1976. Tablettes administratives de Haft-Tépé. *Cahiers de la Délégation Archéologique Française en Iran* 66: 93–116.
- Hilgert, M. 1998. *Drehem Administrative Documents from the Reign of Šulgi*. Cuneiform Texts from the Ur III Period in the Oriental Institute 1, Oriental Institute Publications 115. Chicago: Oriental Institute.
- . 2003. *Drehem Administrative Documents from the Reign of Amar-Suena*, Oriental Institute Publications 121. Chicago: Oriental Institute.

- . 2012–2013. Šuhnir. *Reallexikon der Assyriologie* 13: 263–264.
- Hinz, W. 1967. Elams Vertrag mit Narām-Sîn von Akkade. *Zeitschrift für Assyriologie* 58: 66–96.
- Hinz, W. and Koch, H. 1987. *Elamisches Wörterbuch* 1–2, Archäologische Mitteilungen aus Iran Ergänzungsheft 17. Berlin: Reimer Verlag.
- Hussein, A.M., Hamza, H.A., Thaher, A.K., Kadhum, S.J., Hashem, M., Taha, H.M., Altaweel, M.R. and Studevent-Hickman, B. 2010. Tell Abu Sheeja/Ancient Pashime: Report on the first Season of Excavations, 2007. *Akkadica* 131: 47–103.
- Jalilvand Sadafi, Sh. 2013. Prosopographische Untersuchungen anhand Rechtsurkunden aus Susa. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*, MDP 58. Leiden: Brill, 355–364.
- Joannès, F. 1984. Contrats de mariage d'époque récente. *Revue d'Assyriologie* 78: 71–81.
- König, F.W. 1965. *Die elamischen Königsinschriften*, Archiv für Orientforschung Beiheft 16. Graz: Weidners Selbstverlag.
- Krebernig, M. 2014. Tuzi. *Reallexikon der Assyriologie* 14: 249b.
- Kutscher, R. 1989. *The Brockmon Tablets at the University of Haifa: Royal Inscriptions*. Haifa: Haifa University.
- Lambert, W.G. 1991. The Akkadianization of Susiana under the Sukkalmahs. In: De Meyer, L. and Gasche, H. (eds.) *Mésopotamie et Elam. Actes de la XXXVI^{ième} Rencontre Assyriologique Internationale (Ghent 10–14 July 1989)*, MHE, Occasional Publication 1. Ghent: University of Ghent, 53–57.
- Lattimore, O. 1989. *Inner Asian Frontiers of China*. Hong Kong: Oxford University Press.
- Mayrhofer, M. 1973. *Onomastica Persepolitana. Das altiranische Namengut der Persepolis-Täfelchen*, Sitzungsberichte der Österreichischen Akademie der Wissenschaften 286. Vienna: Österreichische Akademie der Wissenschaften.
- Michalowski, P. 2008. Observations on “Elamites” and “Elam” in Ur III Times. In: idem (ed.) *On the Third Dynasty of Ur: Studies in Honor of Marcel Sigrist*, Journal of Cuneiform Studies Supplementary Series 1. Boston: American Schools of Oriental Research, 109–123.
- Neumann, H. 2011. Ur III-Texte. In: Streck, M.P. (ed.) *Die Keilschrifttexte des Altorientalischen Instituts der Universität Leipzig*, Leipziger Altorientalische Studien 1. Wiesbaden: Harrassowitz Verlag, 9–34.
- Notizia, P. 2010. Hulibar, Duhduh(u)NI e la frontiera orientale. In: Liverani, M. and Biga, G.M. (eds.) *Ana turri gimilli. Studi dedicati al Padre Werner R. Mayer S.J. da amici e allievi*, Vicino Oriente 5. Rome: Università “La Sapienza”, 237–260.
- . 2011. Addenda a “Hulibar, Duhduh(u)NI e la frontiera orientale”. *Nouvelles Assyriologiques Brèves et Utilitaires* 2011/72.
- Owen, D.I. 1981. Review of Edzard and Farber 1974. *Journal of Cuneiform Studies* 33: 244–270.
- . 1994. More Neo-Sumerian Texts from American Collections. *Journal of Cuneiform Studies* 46: 17–27.
- Owen, D.I. and Wasilewska, E. 2000. Cuneiform Texts in the Arizona State Museum, Tucson. *Journal of Cuneiform Studies* 52: 1–53.
- Perlov, B. and Saveliev, Y. 2014. *Cuneiform Texts in the Collection of the Pushkin State Museum of Fine Arts, 1. Administrative Texts from Tello from the Ur III period*. Moscow: Paleograph.
- Potts, D.T. 2005. In the Beginning: Marhashi and the Origins of Magan's Ceramic Industry in the Third Millennium BC. *Arabian Archaeology and Epigraphy* 16: 67–78.
- . 2010. Adamšah, Kimaš and the Miners of Lagaš. In: Baker, H.D., Robson, E. and Zólyomi, G. (eds.) *Your Praise Is*

- Sweet: A Memorial Volume for Jeremy Black from Students, Colleagues and Friends*. London: British Institute for the Study of Iraq, 245–254.
- Sallaberger, W. and Westenholz, A. 1999. *Mesopotamien: Akkade-Zeit und Ur III-Zeit*. Annäherungen 3, Orbis Biblicus et Orientalis 160/3. Fribourg – Göttingen: Vandenhoeck and Ruprecht.
- Saporetti, C. 2002. *La rivale di Babilonia. Storia di Ešnunna, un potente regno che sfidò Hammurapi*, I volti della Storia. Roma: Newton & Compton.
- Sauren, H. 1978. *Les tablettes Cuneiformes de L'époque d'Ur des collections de la New York public Library*, Université Catholique de Louvain, publications de l'Institut orientaliste, 19. Louvain-la-Neuve: Institut orientaliste.
- Sharlach, T.M. 2004. *Provincial Taxation and the Ur III State*, Cuneiform Monographs 26. Leiden: Brill.
- Sigrist, M. 1995. *Neo-Sumerian Tablets from the Royal Ontario Museum 1*. Bethesda, MD: CDL Press.
- . 2004. *Neo-Sumerian Texts from the Royal Ontario Museum 2: Administrative Texts Mainly from Umma*. Bethesda, MD: CDL Press.
- . 2005. *Tablets from the Princeton Theological Seminary*. Part 2, Occasional Publications of the Samuel Noah Kramer Fund 18. Philadelphia: Babylonian Fund, University Museum.
- Sigrist, M. and Ozaki, T. 2013. *Administrative Ur III Texts in the British Museum (AUTBM)*. Part 1: Texts Nos. 1–1010; Part 2: Texts Nos. 1011–1785 (Periodic Publications on Ancient Civilizations 5). Changchun: Northeast Normal University.
- Steinkeller, P. 1982. The Question of Marḥaši. A Contribution to the Historical Geography of Iran in the Third Millennium B.C. *Zeitschrift für Assyriologie* 72: 237–265.
- . 1988. On the Identity of the Toponym LÚ.SU.(A). *Journal of the American Oriental Society* 108: 197–202.
- . 1990. More on LÚ.SU.(A) = Šimaški. *Nouvelles Assyriologiques Brèves et Utilitaires* 1990/13: 10–11.
- Steve, M.-J. 1992. *Syllabaire élamite: Histoire et paléographie*. Neuchâtel: Civilisations du Proche-Orient, Série 2, Philologie 1.
- Stolper, M.W. 1988. Malamir. *Reallexikon der Assyriologie* 7: 279–280.
- Tammuz, O. 2000. A Loan Document from Elam. *Revue d'Assyriologie* 94: 17–19.
- Tavernier, J. 2011. Iranians in Neo-Elamite Texts. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*. Winona Lake: Eisenbrauns, 191–261.
- Tohru, O. 2002. *Keilschrifttexte aus japanischen Sammlungen*, SANTAG 7. Wiesbaden: Harrassowitz Verlag.
- Vallat, F. 1980. *Suse et l'Élam*, Recherches sur les grandes civilisations. Etudes élamites, Mémoire n° 1. Paris: Recherches sur les civilisations.
- . 1985. Éléments de géographie élamite (résumé). *Paléorient* 11/2: 49–54.
- . 1993. *Les noms géographiques des sources suso-élamites*, Répertoire Géographique des Textes Cunéiformes 11. Wiesbaden: Reichert Verlag.
- Waetzoldt, H. 1975. Review of Edzard and Farber 1974. *Zeitschrift für Assyriologie* 65: 267–278.
- Yusifov, Yu. B. 1968. *Elam: Sotsya'no-Ekonomičeskaya Istoriya*. Moscow: Nauka.
- Zadok, R. 1983. A Tentative Structural Analysis of Elamite Hypocoristica. *Beiträge zur Namenforschung* Neue Folge 18: 93–120.
- . 1984. *The Elamite Onomasticon*, Supplement 40 to *Annali dell'Istituto Orientale di Napoli* 44/3. Naples: Istituto Orientale.

- . 1991. Elamite Onomastics. *Studi Epigrafici e Linguistici* 8: 225–237.
- . 1993. Hurrians as Well as Individuals Bearing Hurrian and Strange Names in Sumerian Sources. In: Rainey, A.F. (ed.) *Kinattūtu ša dārāti: Raphael Kutscher Memorial Volume*. Tel-Aviv: Journal of the Institute of Archaeology of Tel-Aviv University, Occasional Publications 1. Tel Aviv: Tel-Aviv University, Institute of Archaeology, 219–245.
- . 1994. Elamites and Other Peoples from Iran and the Persian Gulf Region in Early Mesopotamian Sources. *Iran* 32: 31–51.
- . 2002. The Ethno-Linguistic Character of Northwestern Iran and Kurdistan in the Neo-Assyrian Period. *Iran* 40: 89–151.
- . 2011. The Babylonia-Elam Connections in the Chaldean and Achaemenid Periods. *Tel Aviv* 38: 120–143; 241–271.
- . 2013. Linguistic Groups in Iran. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press, 407–422.

CHAPTER NINE

Elamites and Iranians¹



Jan Tavernier

Introduction

The Achaemenid empire and its history are intensively studied topics, as the empire itself is considered to be the first truly Iranian empire. The Iranian character of the Achaemenid empire has long been recognized and is continually being corroborated by the strong presence of Iranian names in non-Iranian texts from the Achaemenid period (cf. Tavernier 2007 and the volumes of the series *Iranisches Personennamenbuch* dedicated to the Old Iranian names).

This substantial attention to the Achaemenid empire is in sharp contrast with the relatively low degree given to the Neo-Elamite period. It is only in the last decade, thanks to new discoveries in the field, that more and more archaeologists, historians and philologists have started to conduct thorough research on this transitional period between the Middle Elamite and Achaemenid periods.

Part of this research has concentrated on the presence of Iranians in Neo-Elamite Elam, whereby it has become clear that the Iranians were already established in the whole of Elam during the Neo-Elamite period. Indeed, it is now recognized that for many years before the appearance of the Achaemenid Persian empire, there were close contacts between the Iranian and Elamite populations settled in Elam. This interaction can easily be considered as formative for the Achaemenid empire and logically reinforces the link between both periods.

In this chapter, Iranians and Elamites and their relation with each other in both the Neo-Elamite and Achaemenid periods will be studied. With regard to the Neo-Elamite period, a geographical model will be maintained (lowland versus highland), whereas for the Achaemenid period a more general model can be used.

Neo-Elamite period (C.1000–550 BC)

As already mentioned, contrary to the many publications dealing with the Iranian theonyms, anthroponyms, toponyms, hydronyms, oronyms and loanwords attested in Achaemenid

Elamite texts, little work has been done on the Iranian linguistic elements in Neo-Elamite documents. Only Mayrhofer (1971), Hinz (1967), Zadok (1984) and Tavernier (2002) have published some notes on them, and a general study of the presence of Iranian proper names and loanwords in the Neo-Elamite period was published by Tavernier (2011). In the latter work, the methodology used to classify the Iranian proper names and loanwords is the same as has been used for the study of Iranian elements in non-Iranian texts from the Achaemenid period (Tavernier 2007). Following this system, the Iranica can be divided in four categories:

- (1) Directly transmitted Iranica: Names and words that are attested in their Iranian form (i.e. the Achaemenid Royal Inscriptions).
- (2) Semi-directly transmitted Iranica:
 - Names and words that are identical to Iranica from the Achaemenid Royal Inscriptions but that are attested in a documentary text.
 - Proper names and loanwords whose Iranian original is attested in the Achaemenid Royal Inscriptions but which are still slightly different. Such a difference might be a dialectal one (e.g. Old Persian *Ṛtavardiya-* vs. Median **Ṛtavarziya-*), but contracted or monophthongized equivalents of forms, belonging to category one, are also included here (e.g. **yanē* vs older *yanaiy*).
- (3) Foreign Iranica: Non-Iranian expressions for which there is no doubt about their transmission to the Elamites by Old Iranian.
- (4) Indirectly transmitted Iranica: Reconstructed Old Iranian proper names and loanwords.

The Iranica belonging to the last three categories are always marked by an asterisk. Also note that, due to the lack of Old Iranian texts dating from the Neo-Elamite period (the oldest Old Iranian written text is the so-called Bisotun Inscription from Darius I), there are no Neo-Elamite Iranica belonging to the first and third categories.

Inevitably, there are also names and words that appear to be Iranian but have many uncertainties. These are brought together in a group called “Incerta,” which is divided into five subgroups:

- (1) Fragmentary names and words.
- (2) Hybrids: names and words belonging partly to the Iranian language and partly to a non-Iranian language.
- (3) Problematic names and words: Iranica whose analysis is problematic.
- (4) Dubia: names and words whose Iranian character is uncertain.
- (5) Pseudo-Iranica: names and words that were once believed to be Iranian but whose Iranian character is now abandoned.

In Neo-Elamite texts, the first two categories are not represented.

Most specialists believe that the Iranians arrived in Iran around 1000 BC (cf. Witzel 2009 on the Iranian migration in the 2nd millennium BC). The first attestations of Iranian-speaking people occur in the Neo-Assyrian royal inscriptions (annals) of Ashurnasirpal II (883–859 BC), who confronted Iranian tribes in the Zagros Mountains while expanding the Assyrian territory towards the east. Of these tribes, the Medes and the Persians are the most frequently attested, appearing repeatedly in the Assyrian sources (cf. Radner 2013 on the relations between Assyrians and Iranians).

The oldest attestation of an Iranian element dates to 879 and occurs in an inscription from Ashurnasirpal II. There Amika (= Ir. *Am-ika-, a hypocoristic of a name with element *ama- “(military) strength”) and Araštua (Ir. *Rša-tavā “Having the strength of a hero”), two chieftains in the land of Zamua, came into conflict with the Neo-Assyrian king. Clearly, this proves Iranian presence in the 9th century in the Zagros (cf. Radner and Schmitt 1998a and 1998b).

The Medes appear from 835 onwards (^{kur}A-ma-da-a-a; RIMA 3 A.0.102.14:121), but more interesting for this study is the occurrence, from 843 onwards, of a land called Pār-su-a or Par-su-ma-áš/Par-su-ú-ma-áš, which is clearly, at least from a linguistic point of view, the predecessor of the later name Pārsa (modern Fārs = Persia), the region in southwest Iran where the Achaemenid empire would be established. That these regions were not politically unified is proven by the fact that many kings/chieftains of various areas are attested. In one passage, Shalmaneser III mentions no less than 27 kings of the land of Parsua.

In 744 Tiglath-pileser III (744–726 BC) established two Assyrian provinces in Iran (Parsua and Bit-Ḥamban), meaning that for the first time in history the Assyrian Empire controlled territory in the eastern Zagros (Radner 2013: 443). Another important event is recorded by Ashurbanipal. After having sacked Susa in 646, the Assyrian king reports that two kings, Kuraš of Parsumash and Pizlume of Hudimiri, being full of fear after hearing of Ashurbanipal’s powerful and awe-inspiring deeds, sent their tribute to Ninive. Kuraš even sent his son Arukku with this tribute.

For a long, time researchers embraced the tempting thought that Kuraš of Parsumash was identical with Cyrus I of Anshan, the grandfather of Cyrus II the Great (cf. *infra*). More recently, however, this idea has been rightfully abandoned by scholars like Miroschedji (1985) and Potts (2005: 18–20, with literature), and it is now generally accepted that they were not the same person. One of the objections is that if Cyrus of Parsumash was identical with Cyrus I of Anshan, the grandfather of Cyrus II and founder of the Achaemenid empire around 550 BC, the reigns of the Anshanite kings Cyrus I and Cambyses I would have been exceptionally long (Miroschedji 1985: 283–285).

In the same way the historical geography was blurred (Miroschedji 1985: 268–278), as scholars thought that there were no less than three regions Parsua/Parsumash/Parsa: one

located to the southwest of Lake Urmia (northern Zagros), one in the Central Zagros and one in the neighbourhood of Anshan. Cameron, for instance, believed that the existence of these three regions was a pivotal indication for the migration route of the Persians towards Fārs: around 815 they moved from the northern Zagros to the central Zagros, from where they finally arrived in Parsa (Anshan) during the first half of the 7th century. Again, this idea has been critically considered and consequently abandoned after it was established that the capital city of Anshan was located in Tall-e Malyan, more than 500 km away from the central Zagros.

Summarizing, it may be accepted that:

- (1) Cyrus of Parsumash reigned around 646 over an area situated somewhere in the central Zagros, whereas Cyrus I reigned in Ashan, modern Fārs.
- (2) Both Cyruses cannot be identical because of the aforementioned geographical and chronological as well as chronographical objections.

These conclusions have their bearing on the present chapter. They clarify the history of the Fars region and thereby of the rise of the Achaemenid empire, where Elamites and Iranians would constitute one single people.

It is the intention of this section to discuss the Iranian presence in the region of Susa (lowland) and in the region of Anshan (highland). Further on, Iranian presence in other regions (the region between Susa and Anshan) will also be examined.

Susiana

After the sack of Susa by Ashurbanipal in 646 BC, it probably did not take long for the kingdom of Susa to re-emerge, despite Ashurbanipal's claim that his destruction of the city was thorough and definitive. Elamite royal and other inscriptions found in Susa and dated to the period between c.640 and c.550 confirm the existence of a centralized Susian kingdom. This is corroborated by two other archives found in Susa and dated to c.600–580 BC. The first one, called the Susa Acropole Archive, consists of about 300 administrative and economic documents and mentions various officials. The documents were published by Scheil (MDP 9 1–298 and MDP 11 309). About ten percent of the personal names occurring in this archive are Iranian (Hinz 1987: 128; Henkelman 2003a: 212). The second archive, consisting of seven documents, is a legal archive, usually called the Susa Apadana Archive (also published by Scheil in MDP 11 301–307).

The Susa Acropole Archive provides first-hand information on the presence of Iranians in the late Neo-Elamite period at Susa. In fact, various Iranian anthroponyms (95), toponyms (5) and loanwords (4) clearly attest to the Iranian presence in Susa and its surroundings. As there are only seven documents contained in the Susa Apadana Archive, fewer Iranian linguistic elements (personal names, place names, loanwords) are represented there.

By contrast, the Neo-Elamite royal inscriptions do not contain any Iranian personal names, implying that political power was held by ruling families of Elamite linguistic background. Nevertheless, Iranians may very well have held high administration positions within local political systems. In this sense it is a pity that the name of the highest official mentioned in the archive, Kuddakaka, can be considered either Iranian or Elamite (Tavernier 2011: 209). The fact that Iranians could have some social status in Elam is proven by their being owners of seals.

The Susa Acropole texts yield some historical information on the Iranians active at Susa and surrounding areas (cf. Tavernier 2011: 240–243). They mention three Persian population groups: *Dātāyana- (MDP 9 51, 187, 272, 281; named members of this tribe are *Patirapa-, *Teza-, *Vantuka- and *Yuvataka-), Huri (no named members) and Zambegir (with only one named member *Spakṛta-). The three groups are explicitly called “Persian”, which is also the distinguishing feature between these groups and the small groups discussed below. Scheil (1907: 17) wonders whether they were Persians already living in Susiana before Cyrus’ accession to the throne or Persian tribes not living in Susiana, but still serving as tributaries to the Susian king. Unfortunately, a definite answer to this issue is difficult to give, as both are plausible ideas.

The inhabitants of the kingdom of Susa were probably organized in small population groups around one central figure. The dependents of these groups are indicated by adding an Elamite suffix to the name of the central figure, for example, *-r* (sg.) or *-p* (pl.). In this way *Bagabāzu- (^{be}Ba-ag-ba-šu) is called “the one of the people of *Kṛpānmā” (^{be}Kur-ru-ip-pan-ma-pé-ra; cf. Hinz and Koch 1987: 532) or in MDP 9 133, one has the formula 3 ^{be}Nap-tuk-ip 2 ^{be}Ir-da-ad-da “3 (subordinates) of *Naptaka-, 2 (subordinates) of *Ṛdata-”. In MDP 9 133, an anonymous messenger (^{be}hu-ut-lak) of *Pāθrāna- is mentioned.

The attested central figures with Iranian names and their subordinates (if their name is known) are:

- (1) *Aina-
- (2) ^{be}Ka₄-gi-ās-ba
- (3) *Kamna-
- (4) *Kṛpānmā (subordinates: *Bagbāzu-, *Bagrapa-, *Vananta-)
- (5) *Manuša-
- (6) *Naptaka-
- (7) *Pāθrāna- (subordinates: ^{be}Ad-da-te-en, an unnamed messenger)
- (8) *Rōpāθa- (subordinate: ^{be}Lu-da-da)
- (9) *Ṛdata-
- (10) *Θrābuka- (subordinate: *Bāmkaca-)
- (11) *Θrāya-
- (12) *Vaigana- (subordinate: ^{be}Ha-mi-ti-ra)

Not only individuals bearing Iranian names could be such central figures. People with Elamite names, too, could have this role. Examples of such individuals are:

- (1) ^{be}A-a-zip-pi
- (2) ^{be}Ak-ki-ra-ra (subordinate: *Bāma-)
- (3) ^{be}Ap-pa-la-a-a (subordinate: *Xsaparapa-)
- (4) ^{be}Hu-ban-ki-tin
- (5) ^{be}Hu-ban-hal-tas
- (6) ^{be}La-li-in-tas
- (7) ^{be}Su-un-ki-ba-ki-iš
- (8) ^{be}Um-be-nu-iš

One might be inclined to think that these small groups are also ethnic categories and that we are dealing here with Iranian or Elamite tribes. This is, however, not very likely. The main argument against this idea is the fact that some of the central figures are also mentioned in the Acropole texts as individuals (i.e. tribes or ethnic groups would more likely be named after eponyms, not after still living individuals). If they were merely eponyms, their appearance in the texts is relatively unusual. There may rather be a hierarchic system at work, according to which the central figure is head of a clan or a business unit.

The socio-economic role of the people bearing Iranian names is not different from that of the people bearing Elamite names. They all receive various garments and other objects such as bows, shafts, spears and so on. They appear as witnesses (*Arina-, *Gitika-) or as one of the parties in legal texts of the Apadana Archive (^mKu-na-ra-mi-ka₄). Some of the men bearing Iranian names certainly had, however, high socio-economic positions, as may be deduced from the existence of the central figures described above and from their ownership of seals.

The individuals with Iranian names apparently had no political power in the kingdom of Susa. Nevertheless, they could hold important administrative roles. *Arina- had the title *rab ekalli*, a chief palace official; if ^{be}Ku-ud-da-ka₄-ka₄ is an Iranian name, then another high official (*arash hutlak*) could have been an Iranian. *Hiθika- also may have been quite important, since a statue of a god was assigned to him. People bearing Iranian names could also be subordinates of people with non-Iranian names. Overall, it is conspicuous that, despite the rather low number of Iranian personal names (10%), there are more central figures with an Iranian name than central figures with a non-Iranian name.

Despite the close contacts between Elamites and Iranians, the individuals with Iranian names attested in the Acropole texts are often mentioned together; a few texts have (almost) only Iranian names and it is rare for a text to have only one Iranian name.

Nonetheless, one should not overestimate the Iranian segregation in Elam. On the contrary, the close contacts are proven by the fact that, as [Table 9.1](#) shows, the people bearing Iranian

names often occur together with those bearing Elamite names. Moreover, if Pír-na is the Elamite rendering of an Old Iranian name *Farnah-, as Zadok (1984: 388) claims, then a person bearing an Iranian name would have had two sons with Elamite names (Simimi and Upuhu). Hinz and Koch (1987: 211) believed it was an Elamite name, but without presenting an Elamite etymology. In fact, there is a convincing Iranian etymology, and an Elamite one is very difficult to find, so it may, despite Tavernier's (2011: 209) doubts, very well be an Iranian name. This only enhances the intensity of Elamo-Iranian contacts and integration at that time.

[Table 9.1 Elamite and Iranian names in MDP texts](#)

<i>Text</i>	<i>Iranian names</i>	<i>Elamite and other names</i>
MDP 9 11	*Bagrapa-, *Dayāta-, *Hvāθris	Kuddakaka (if Elamite)
MDP 9 49	*Kṛpānmā	Mutiti
MDP 9 51	*Nāfēca-, *Patirapa-, *Tēza-, *Xvarθis, *Yuvātaka-	Kuddakaka (if Elamite)
MDP 9 63	*Arina-, *Kṛmi-, *Manuša-	–
MDP 9 71	*Arina-, *Sakidēva-	Aplaya- (Semitic)
MDP 9 94	*Ama-, *Māda-	Akšin-kilik, Anni-šilha, Atta-kitin, Sunki-bakuš, Unzi-[], etc.
MDP 9 101	*Franjana-, Kagiasba, *Vananta-	Atta-Barru
MDP 9 110	*Hadāspa-, *Pāθrāna-, *Vṛzvanta-	Attaten, Humpanta, Napupu
MDP 9 132	*Aspavika-, *Uvaxstra-, *Xsaparapa-	Halluš, Humpan-ampa, Kitin-Humpan, Upuhu
MDP 9 133	*Bagbāzu-, *Katāna-, *Pāθrāna-, *Franjana-, *Ṛdata-	–
MDP 9 134	*Pāyu-, *Sugda-	Kutup, Lalu-in-taš, Napkilapal
MDP 9 135	*(H)uvataxsa-, *Miθra-	Anni, Kikkit, Kutur, Kutur-ter, Lalu-in-taš
MDP 9 145	*Arina-, *Vēskāma-, *Vīdamanā	Itpun, Ittiti, Mardu-nukaš
MDP 9 147	*Manuša-, *Rōpāθka-, *Zāta-	Hutradadda, Simimi
MDP 9 148	*Bāmakaca-, *Kṛpānmā, *Pāθrāna-	Ittiš, Lillu

MDP 9 157	*Gōmāya-, *Gōšaya-, *Kṛpānmā	Unsak
MDP 9 160	*Bāma-, *Vēskāma-	Akkirara, Hamitira
MDP 9 187	Baksienda, *Bagbādu-, Mitilaksar, *Vantuka-, *Vṛzvanta-	Halluš
MDP 9 199	*Kāra-, *Maθiya-, *Pāyuna-	–
MDP 9 229	*Bṛga-, *Gōmāya-, *Gōšaya-	Hulili
MDP 9 259	*(H)ubṛga-, *Mazdara-	18 Elamite names
MDP 9 289	*Maθāna-, *Rōpāθka-	Kursu, Lalu-sunkik

For the sake of completeness, it should be noted that the region of Susiana was not just populated by Iranians or Elamites. In the Acropole Archive two kings of a people called Zari are mentioned: Aplaya- is called “king of the Zarians” (MDP 9 71:2; [su]nki ^{aš}Za-ri-pé-ra), as well as ^{be}Mar-tuk (MDP 9 80:3; sunki ^{aš}Za-ri-pé-[r]a). Both names (Aplaya- and Marduk) are Akkadian, which supports Henkelman’s (2003b: 257) thesis that the Zarians might have been an “Aramaic or Chaldaean tribe on the south-western fringe of Khuzestan”.² It may be that the border region of Susiana and Mesopotamia was inhabited by Aramaean and Chaldaean tribes. Babylonians also occur in an administrative text, recorded in Akkadian and containing only Babylonian names, dated to the 15th year of Hallutaš-Inšušinak II, king of Elam (probably the end of the 7th century BC). The text, concerning an adoption of a girl, clearly emanates from a Babylonian community in the town of Sumundunaš in the Susiana region. Another text (PTS 2713; Stolper 1986: 236) again only has Babylonian names and was drafted in the first year of the same king Hallutaš-Inšušinak II in the town of Bīt-Ḫulummu. Of a third text dated to this king (VS 4 1; cf. San Nicolò and Ungnad 1935: 199 no.165), the exact date and place where it was drafted are lost. The existence of an “assembly of the Babylonians” in the town of Hidalu is demonstrated by a text (Leichty 1983: 154) dated to the accession year of Tammartu, the king installed in Hidalu by Ashurbanipal around 653 BC.

Anshan

The date of the arrival of the Iranian immigrants in the region of Anshan (modern Fārs) is difficult to determine. The texts are silent on the population movements, and the archaeology is not very helpful either. In fact, there are no signs of sedentary occupation in Anshan between the late Middle Elamite and Achaemenid periods (Potts 1999: 262). An explanation

for this is that the people living in Anshan were probably semi-nomadic and therefore more difficult to trace in the archaeological records (Miroschedji 1985: 289–292).³ Nevertheless, a date around 1000 BC seems to be quite plausible (Miroschedji 1985: 292).

Since about 1500 BC the number of settlements in the Anshan region had started to decline, while at the same time new types of ceramics appeared. These two developments imply a greater role played by nomadism but should not be linked to the immigration of Iranian-speaking tribes (Miroschedji 1985: 290). It remains true, however, that the Iranians could have benefited from this nomadisation by settling themselves in the area.⁴

In the 10th century BC this depopulation was at its maximum, as demonstrated by the fact that only at two sites (and in small numbers) Iron Age II sherds were found in the Anshan region. Moreover, for the 7th century there is no archaeological evidence in the area, except for the reliefs of Kurangun and Naqsh-e Rostam, again confirming a high level of pastoralist nomadism (Miroschedji 1985: 292).

If the date of the Iranian arrival in Fārs around 1000 BC is correct, contacts between Elamites and Iranians existed since this date, although not much is known of them.

These contacts are also illustrated by the fact that troops from Anshan as well as troops from Parsuaš fought together in the battle of Ḫalule in 691 BC against the Neo-Assyrian king Sennacherib (Waters 2011: 286). It was in this period that the process of “ethnogénèse des Perses” (Miroschedji 1985: 295) was ongoing, which would culminate in the Elamo-Persian culture of the Achaemenid Empire.

The political status of Anshan and its surroundings in the 7th century is not clear, despite Miroschedji’s hypothesis (1985: 304) that Anshan still belonged to the kingdom of Susa (in his eyes, this control lasted until 646). The authority of the Susian kingdom over Anshan must have been very lax (Miroschedji 1985: 291). In the context of a weaker Susian kingdom (certainly after the Assyrian attack of 646), a new Anshanite kingdom was established around 635 BC (Miroschedji 1985: 284 and 304). Its first king was called Teispes (hence the name “Teispid kingdom”), who was a direct forebear of Cyrus II, the founder of the Teispid/Achaemenid empire. One can find this genealogy on the famous Cyrus cylinder, a royal inscription in which Cyrus II justifies his conquering of Babylonia.

Teispes would be succeeded by Cyrus I, of whom the seal is still preserved (cf. the most recent collation by Waters [2011: 290] which, however, does not yield a plausible result) and who reigned c.610–585 BC. His successors were Cambyses I (c.585–559 BC) and the well-known Cyrus II (c.559–530 BC), who would establish the Teispid/Achaemenid empire. These kings (or, at least, Cyrus II) most likely bore the royal title “King of Anshan”, as is clear from *inter alia* the Cyrus Cylinder (Miroschedji 1985: 296–298). Actually, the title “King of Parsa”, was only in use from the reign of Darius I (521–486 BC) onwards. Note also that from then on the name Anshan is attested only once again, in the Bisitun inscription (Waters 2011: 287).

It is not within the scope of this chapter to discuss the beginnings of the kingdom of Anshan

and its relation with its successor, the Achaemenid Empire. Many scholars have already dedicated time and energy to this debate (cf. recently Quintana 2011, Vallat 2011 and Waters 2011, to name but a few).

More interesting is to have a look at the ethnic character of the ruling dynasty of this Anshanite kingdom. From the ethnic point of view, a highly interesting development can now be seen in Fars, where Elamite and Iranians (Persians) had already lived together for centuries. It is difficult to assess the principal ethnicity of the kingdom itself. Was it an Elamite kingdom, or an Iranian one? The truth lies most likely somewhere in the middle and the idea of an “ethnogénèse des Perses”, as Miroschedji (1985: 295) calls it, is, admittedly, quite attractive. It postulates a gradual melting together of the Iranians and the Elamites, creating a new people, traditionally called Persians. It is out of this amalgamation process that the Achaemenid culture would be born.

With regard to the material culture, one rather sees an Elamite culture. For instance, seals are in a Neo-Elamite style. The first seal in Achaemenid style dates from the reign of Darius I. Nevertheless, the material and artistic culture of Susa and Anshan was not different in the 7th and 6th centuries and must be called Neo-Elamite rather than Iranian (Miroschedji 1985: 300–301).

The textual sources, too, may give us some information on the character of the Teispid culture. First of all, the royal names Teispes (Old Persian *Cišpiš*, Elamite *Sešpeš* or *Zišpiš* [Achaemenid]) and Cyrus (Old Persian *Kuruš*, Elamite *Kuraš*) can most likely not be attributed to the Iranian language family. Rather (certainly concerning the name of Cyrus) they are Elamite, which enhances the idea that the Teispid kingdom was not purely Iranian. Note also that the first version of the Bisitun inscription was the Elamite one and that it was only later that the Old Persian was added (Miroschedji 1985: 301; Huyse 1999).

Further evidence for an ethnically mixed kingdom is found in the Persepolis Fortification and Treasure Archives, the texts of which are drafted in Elamite, proving that the administration set up by Cyrus II in the Anshanite region was originally an Elamite one (Miroschedji 1985: 301–302). The officials probably mastered the two languages (Elamite and Old Persian), as the Elamite texts are flooded by Iranian anthroponyms, toponyms and loanwords (cf. Tavernier 2007), showing a large Iranian presence in the Kur River basin by the reign of Darius I. Moreover, the Elamite texts are also syntactically influenced by Old Persian, for example, concerning word order.

Elsewhere in Elam

Susa and Anshan were not the only regions with a mixed population. It can easily be expected that the regions in between and around them also saw the arrival of Iranian-speaking people. Unfortunately, the textual record of these regions is not very abundant.

In light of this situation, one can only welcome the appearance of various objects found in the so-called Kalmākarra Cave in Lorestān. These objects are usually called the “Kalmākarra Hoard” (Henkelman 2003a: 214–227) and date from the first half of the 6th century BC. Some of the objects bear a label/ownership inscription, which is of interest for this study.

The small inscriptions give us more information on the state of Samati, inhabitants of which are also mentioned in the Susa Acropole Archive. In MDP 9 94, 12 Samatians receive *kuktu*-garments. Two of the 12 individuals (*Ama- and *Māda-) bear Iranian names, whereas the ten others have Elamite names.⁵ This pattern is confirmed in the inscriptions from the Kalmākarra Cave, where, of the 24 personal names, three are Iranian: *Gītiya-, *Hamfrīš and *Tapala- (cf. Vallat 2000, Henkelman 2003a: 222, Tavernier 2011: 199 no. 2.2.24, 199 no. 2.2.1.28, and 205 no. 2.2.1.67). These individuals even occupy high ranks in the Samatian society: *Hamfrīš is king of Samati, whereas *Tapala- is his father and *Gītiya- is named as father of Unsak, another Samatian king. Interesting for the acculturation between Elamites and Iranians is that the brother of *Hamfrīš has an Elamite name (Anni-šilhak) and that two of *Hamfrīš’s sons also have Elamite names (Ahtir⁶ and Unzi-kilik). This means that the acculturation was also active in the ruling dynasty, with its mixed onomasticon (Henkelman 2003a: 224).

Other non-Iranian names occurring in these texts are Aksimarti, Abu-līti,⁷ Aspe, Attasapir, Huban, Hunzak, Indapipi, Ipunukaš, Lalintaš, Pirri, Sapparak, Simima, Turhakra and Umbadudu.

The personal names that occur in both the Kalmākarra inscriptions and the Neo-Elamite texts from Susa are *Hamfrīš, Annišilha(k), Lalintas, Pirri, Umbadudu, Unsak and Untaš. In all probability, Unzi-[] should be restored to ^{be}Un-zī-[ki-li-ik] (Vallat 1996), because the element *unzi* only occurs in this name. Vallat (1996; also Henkelman 2003a: 222 fn. 149) strongly believes in prosopographical identifications of these names, but this is not so easily accepted.

The strongest case is Anni-šilhak, the brother of *Hamfrīš and king of Samati, called “Samatian” in an Acropole text. If one individual is involved here, this would mean that the kingdoms of Susa and Samati had well-established contacts. This would be corroborated if *Hamfrīš the king of Samati is the same as *Hamfrīš who is mentioned in the Acropole texts. The latter is the father of ^{be}Hu-ban-rās-ma.

The style of the objects belonging to the “Kalmakarra Hoard” has many parallels in Achaemenid art. This, combined with the onomastic evidence, may point to a high degree of acculturation between Elamites and Iranians in Samati (Boucharlat 1998: 149–150; Henkelman 2003a: 222).

Finally, one must also mention the few Iranian elements in the Neo-Elamite letter corpus, consisting of the so-called Nineveh letters plus two letters found in Susa but belonging to the same archive (MDP 9 88 and MDP 36 79; cf. Tavernier 2004: 39). A group of Persians is mentioned in BA 4 177 no. 2:13. The Iranian name *(H)ubīza- (spelled Ū-pi-iz-za) occurs in another letter (Tavernier 2011: 200 no. 2.2.1.3). One of the four Iranian loanwords attested in

Neo-Elamite texts (the other occurring in the Susa Acropole Archive), being Old Persian *xšaça- (spelled šá-ah-šá), is also attested in a Nineveh letter (Tavernier 2011: 195 no. 2.1.3.2). This again proves the established Iranian presence in Elam around 600 BC.

Abbreviations

BA	Beiträge zur Assyriologie und vergleichenden semitischen Sprachwissenschaft.
MDP 9	Administrative tablets from the Acropole of Susa published in Scheil 1907.
MDP 11	Elamite inscriptions and tablets in Scheil 1911.
MDP 36	Elamite tablets in Paper 1954.
PTS	Persepolis Treasury Seal.
RIMA 3	Grayson, A.K. 1997. <i>Assyrian Rulers of the Early First Millennium BC II (858–745 BC)</i> , The Royal Inscriptions of Mesopotamia, Assyrian Periods 3. Toronto: University of Toronto.
VS	Vorderasiatische Schriftdenkmaler der Königlichen Museen zu Berlin.

Notes

- [1](#) This research has been funded by the Interuniversity Attraction Poles Programme initiated by the Belgian Science Policy Office (IAP VII/14: “Greater Mesopotamia: Reconstruction of its Environment and History”).
- [2](#) On the precise character of the relation between Aplaya and Marduk, see Gorris 2014, §6.3.
- [3](#) This is in contrast with the northern and central Zagros, where the arrival of Iranian-speaking tribes is archaeologically attested (Miroschedji 1985: 289, who dates this arrival to 1500 BC).
- [4](#) According to Miroschedji (1985: 291), the late Middle Elamite temple and palace of Anshan (Tall-e Malyan) were nothing more than an “îlot de civilisation susienne dans une ville en voie de désurbanisation et dans une région en voie de dépopulation”.
- [5](#) Anni-šilhak, Sunki-bakiš, Akšin-kilik, Atta-kitin, Arra-[], Kašla, Atta-[], Unzi-[] and Itnak. One name is lost.
- [6](#) Cf. Tavernier 2011: 242 fn. 58.
- [7](#) Cf. Tavernier 2011: 242 and fn. 59.

Bibliography

Boucharlat, R. 1998. L’Iran au 1er millénaire avant J.-C. Recherches iraniennes récentes. *Isimu* 1 = In: Córdoba Zoilo, J.M. (ed.) *Actas del I Symposium Internacional. Una década de estudios sobre el Oriente antiguo (1986–1996)*. Madrid: Universidad

- Autónoma, 143–158.
- Gorris, E. 2014. *Power and Politics in the Neo-Elamite Kingdom*, 2 vols. PhD Diss., Université catholique de Louvain, Louvain-la-Neuve.
- Henkelman, W. 2003a. Persians, Medes and Elamites. Acculturation in the Neo-Elamite Period. In: Lanfranchi, G.B., Roaf, M. and Rollinger, R. (eds.) *Continuity of Empire (?). Assyria, Media, Persia*, History of the Ancient Near East. Monographs 5. Padova: S.a.r.g.o.n., 181–231 and Pls. 9–15.
- . 2003b. Defining Neo-Elamite History. *Bibliotheca Orientalis* 60/3–4, cols. 251–263.
- Hinz, W. 1967. Zu den Zeughaustäfelchen aus Susa. In: *Festschrift für Wilhelm Eilers. Ein Dokument der internationalen Forschung zum 27. September 1966*, Wiesbaden: Harrassowitz, 85–98.
- . 1987. Elams Übergang ins Perserreich. In: *Transition Periods in Iranian History. Actes du symposium de Fribourg-en-Brisgau (22–24 mai 1985)*, Studia Iranica, Cahier 5. Leuven: Peeters, 125–134.
- Hinz, W. and Koch, H. 1987. *Elamisches Wörterbuch*, Archäologische Mitteilungen aus Iran, Ergänzungsband 17. Berlin: Dietrich Reimer.
- Huyse, Ph. 1999. Some Further Thoughts on the Bisitun Monument and the Genesis of the Old Persian Cuneiform Script. *Bulletin of the Asia Institute* N.S. 13, 45–66.
- Leichty, E. 1983. Bel-epuš and Tammarišu. *Anatolian Studies* 33: 153–155.
- Mayrhofer, M. 1971. *Aus der Namenwelt Alt-Irans. Die zentrale Rolle der Namenforschung in der Linguistik des Alt-Iranischen*, Innsbrucker Beiträge zur Sprachwissenschaft Vorträge 3. Innsbruck (reprinted in Mayrhofer, M. 1979. *Ausgewählte Kleine Schriften*, Wiesbaden: Reichert, 127–141).
- Miroschedji, P. de 1985. La fin du royaume d'Anšan et de Suse et la naissance de l'Empire perse. *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 75: 265–306.
- Paper, H.H. 1954. Note préliminaire sur la date des trois tablettes élamites de Suse. In: Ghirshman, R. (ed.) *Village perse-achéménide*, Mémoires de la Mission Archéologique en Iran 36. Paris: Presses Universitaires de France, 79–82 and Pl. XXIV.
- Potts, D.T. 1999. *The Archaeology of Elam: Formation and Transformation of an Ancient Iranian State* (Cambridge World Archaeology). Cambridge: Cambridge University Press.
- . 2005. Cyrus the Great and the Kingdom of Anshan. In: Curtis, V.S. and Stewart, S. (eds.) *Birth of the Persian Empire, The Idea of Iran* 1. London – New York: I.B. Tauris, 7–28.
- Quintana, E. 2011. Elamitas Frente a Persas: el Reino Independiente de Anšan. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*. Winona Lake: Eisenbrauns, 167–190.
- Radner, K. 2013. Assyria and the Medes. In: D.T. Potts (ed.) *The Oxford Handbook of Ancient Iran*. Oxford – New York: Oxford University Press, 442–456.
- Radner, K. and Schmitt, R. 1998a. Ameka. In: Radner, K. (ed.) *The Prosopography of the Neo-Assyrian Empire* 1/I. Helsinki: The Neo-Assyrian Text Corpus Project, 100.
- . 1998b. Araštua. In: Radner, K. (ed.) *The Prosopography of the Neo-Assyrian Empire* 1/I. Helsinki: The Neo-Assyrian Text Corpus Project, 124.
- San Nicolò, M. and Ungnad, A. 1935. *Neubabylonische Rechts- und Verwaltungsurkunden* 1: Rechts- und

- Wirtschaftsurkunden der Berliner Museen aus vorhellenistischer Zeit.* Leipzig: J.C. Hinrichs.
- Scheil, V. 1907. *Textes élamites-anzanites. Troisième série*, Délégation en Perse, Mémoires 9. Paris: Ernest Leroux.
- . 1911. *Textes élamites-anzanites. Quatrième série*, Délégation en Perse, Mémoires 11. Paris: Ernest Leroux.
- Stolper, M.W. 1986. A Neo-Babylonian Text from the Reign of Hallušu. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmentae Historiae Elamicae. Mélanges offerts à M.J. Steve*. Paris: Éditions Recherche sur les Civilisations, 235–241.
- Tavernier, J. 2002. Iranian Presence in Neo-Elamite Susa. *Nouvelles Assyriologiques Brèves et Utilitaires* 2002/79.
- . 2004. Some Thoughts on Neo-Elamite Chronology. *ARTA* 2004.003, 44 pp.
- . 2007. *Iranica in the Achaemenid Period (ca. 550–330 B.C.)*. *Lexicon of Old Iranian Proper Names and Loanwords, Attested in Non-Iranian Texts*, Orientalia Lovaniensia Analecta 158. Leuven – Paris – Dudley, MA: Peeters.
- . 2011. Iranians in Neo-Elamite Texts. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*. Winona Lake: Eisenbrauns, 191–262.
- Vallat, F. 1996. Le royaume élamite de SAMATI. *Nouvelles Assyriologiques Brèves et Utilitaires* 1996/31: 21–22.
- . 2000. Une inscription élamite sur un rhyton en argent à tête de bélier. *Akkadica* 116: 29–33.
- . 2011. Darius, l'héritier légitime, et les premiers Achéménides. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*. Winona Lake: Eisenbrauns, 263–284.
- Waters, M. 2011. Parsumaš, Anšan and Cyrus. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*. Winona Lake: Eisenbrauns, 285–296.
- Witzel, M. 2009. Iranian Migration. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford – New York: Oxford University Press, 423–441.
- Zadok, R. 1984. On Some Non-Semitic Names in the Ancient Near East. *Beiträge zur Namenforschung* N.F. 19, 385–389.

Part III

Elam through history



CHAPTER TEN

The birth of Elam in history



Piotr Steinkeller

Introduction

Due to the virtual absence of pertinent written data from Iran, a reconstruction of the earliest history of Elam must necessarily rely on the testimony of Babylonian cuneiform sources. With the exception of the prehistoric age, our discussion also leaves out archaeological data. The time span covered here is the Late Uruk through the Ur III periods.

Like many other modern terms for the lands of the ancient Near East, the toponym Elam was bequeathed to Western civilization by the Bible, under the form of *‘ēlām*. This Hebrew term derives ultimately from the Sumerian word **Elam** (Akkadian *Elamtu*), an exonym that was used by the dwellers of Babylonia as a designation of the Iranian highlands and of the various ethnic groups living there.¹ As employed in 3rd millennium sources, this designation generally excludes Khuzestan (the Susiana and Deh Luran plains), where the cities of Susa, Arawa (Uru’a), Uru’az, AdamDUN, Awan and Mishime (Pashime) were located. However, already in the Early Dynastic (ED) IIIb sources from Lagash (see *Early Dynastic Period*), **Elam** is occasionally used as a broad description of the entire eastern flank of southern Babylonia.

Since the ED IIIb period, if not earlier, Elam also served as a general and convenient label for the dwellers of the Iranian highlands, meaning “highlander” or the like.² This usage is particularly common in Ur III sources, where Elam indiscriminately describes the natives of AdamDUN, Sabum, Huhnuri, Kimash, Hurti, Shimashki, Anshan, Marhashi (Parahshum) and many other places situated on the Iranian plateau (Notizia 2009). Although some of these ethnic groups undoubtedly were Elamite speakers (or used languages or dialects related to Elamite), it is clear that, in this particular application, the term Elam is devoid of ethnic connotations.

Among the native designations of the Iranian plateau and its population, the earliest such term, which is documented since Sargonic times, is Awan. As far as it can be ascertained, Awan denoted southeastern Khuzestan and the adjoining Iranian highlands, extending to the east as far as Anshan and Marhashi (Parahshum). The native nature of this term (which

practically never appears in Babylonian sources) is demonstrated by the fact that two of the rulers of Elam Sargon faced during his campaigns in Iran are identified, in an Old Babylonian source from Susa, as members of the Awan dynasty (see *Sargonic Period, Introductory Remarks*). Moreover, the title of the “king of Awan” was later used by Puzur-Inshushinak, clearly in reflection of his possession of Khuzestan and the neighboring highlands (see *Post-Sargonic Period*). These data practically assure that “Awan” is a native correspondent of the Babylonian “Elam”, both terms describing roughly the same geographical area – and, during the periods in question, the same political organism. It is unknown, however, whether Awan also carried ethnic and linguistic connotations. Another native word for this part of Iran is *Hatamti* or *Haltamti*, which is documented with certainty only since OB times.³

BC, involved a migration of significant numbers of people from southern Babylonia into its periphery. These individuals subsequently established a network of colonies, which, as far as it can be ascertained, functioned mainly, but certainly not exclusively, as trading outposts. Because of their proximity to Babylonia, and of their being, in geomorphological terms, an extension of the Babylonian floodplain, the regions that had been particularly strongly impacted by the “Uruk Expansion” were the Khuzestan and Deh Luran plains, to the extent that their material culture, represented at such sites as Susa and Choga Mish, is virtually indistinguishable from that found in contemporary southern Babylonia. A likely reflection of this early Babylonian presence in Khuzestan is the fact that the name of the chief deity of Susa, Inshushinak, almost certainly derives from that of the goddess Inana, the patron of Uruk and the most important deity of Late Uruk times.⁴ Since the ultimate source of the “Uruk Expansion” unquestionably was the city of Uruk, it logically was during that particular time that Inana’s cult had been carried from Uruk to Susa.⁵ Apart from Khuzestan, the “Uruk Expansion” left its imprint on various other places in western and central Iran, most notably the site of Godin Tepe in the central Zagros.

The collapse of the “Uruk Expansion”, which was sudden and complete in its consequences, affected Khuzestan as well. As elsewhere in the periphery, in Khuzestan, too, Babylonian presence came to an abrupt end, with the native cultural traditions re-emerging and coming to the fore again. It appears that one of the outcomes of this transformation was the creation of a native form of writing, a development that may have even represented a reaction against the Babylonian domination of Khuzestan. Labeled “Proto-Elamite”, this script is known primarily from the tablets excavated at Susa. In all likelihood, therefore, it was there that this script had been invented. However, examples of it have also been found in other parts of Iran – at Tell Malyan (ancient Anshan) in Fars, Tepe Sialk in the Esfahan province, Ozbaki near Tehran, Tepe Yahya in Kerman and Shahr-i Sokhta in Sistan – demonstrating an amazingly wide geographical distribution of this phenomenon. Although clearly inspired by the proto-cuneiform writing of Late Uruk times⁶ in its choice of signs and because of its other peculiarities, “Proto-Elamite” markedly diverges from the Babylonian prototype. This may have been intentional, perhaps to emphasize the independence of its users from Babylonia and its culture.⁷ Unfortunately, this script, which likely records an early form of the Elamite language, still remains largely undeciphered. For the historian, the greatest interest of “Proto-Elamite” tablets lies in their wide geographical distribution, which suggests that the people who wrote them had adopted not only the Babylonian accounting practices but also the organizational concepts of the “Uruk Expansion”, creating as a result their own, pan-Iranian network of commercial outposts. Be that as it may, the “Proto-Elamite” writing was a short-lived experiment, which probably did not survive into Early Dynastic times.

Early dynastic period (2900–2350)

First certain mentions of Elam and its population appear in the Babylonian texts dating to the Early Dynastic IIIb period (2500–2350 BC).⁸ However, as we have seen earlier, Iran and Babylonia enjoyed close cultural and economic contacts already in Late Uruk times. Such exchanges undoubtedly continued, though probably on a smaller scale, during the Early Dynastic I and II periods. Among the data demonstrating this point are the finds, in the Babylonian contexts dating to ED II, of decorated chlorite vessels stemming from Kerman (ancient Marhashi/Parahshum). Of special interest here is a piece from Adab, which bears an inscription of the ED II king of Kish named Me-silim (Frayne 2008: 71, Me-silim 3).⁹ Another proof of the commercial contacts between Iran and Babylonia during that time are the impressions of cylinder seals excavated at the site of Konar Sandal in the Halil Rud valley (Kerman), whose designs are practically identical to those known from the ED I/II Ur (Madjidzadeh and Pittman 2008: 99–100). Undoubtedly, these sealings accompanied merchandise that had been exported from Babylonia to southeastern Iran.

Our knowledge of political contacts between Elam and Babylonia during ED IIIa is very limited. Such information comes almost exclusively from Lagash sources. These record only two military conflicts with Elam. The first of them occurred during the reign of E-anatum (ca. 2400 BC) and involved E-anatum's military operations against Susa and a number of other cities located in Khuzestan, among them Arawa (Uru'a), Uru'az and Pashime (Mishime) (Frayne 2008: 126–158, E-anatum 1, 5, 6, 7a, 8 and 9).¹⁰ Since E-anatum claims to have sacked and destroyed the latter cities, it appears certain that he actually campaigned in the Susiana. In the same inscriptions, E-anatum also repeatedly boasts of having defeated “the land of Elam” and to have subjugated it (as well as Shubur = Assyria) to the god Ningirsu. It is unlikely, however, that E-anatum campaigned in the highlands, his conflict with Elam probably having been of a purely defensive nature. Apparently, this engagement was part of a larger war, which was waged against the city-state of Lagash by a coalition consisting of Akshak, Kish, Mari, Elam, Shubur and Arawa (Frayne 2008: 145–152, E-anatum 5 and 6). This coalition invaded Lagash's territory, with one of the battles, specifically involving Elam, Shubur and Arawa, having been fought at a Lagash location called Asuhur. The defensive nature of this engagement is revealed by E-anatum's own testimony, according to which “he sent the Elamite back to his land” (Frayne 2008: 145–149, E-anatum 5 vi 8).¹¹ It is possible that this conflict with Elam was causally connected with the aforementioned campaign in Khuzestan, with the latter event having been a consequence of E-anatum's successful repulsion of the foreign armies from the city-state of Lagash.

The other conflict with Elam, in which the Elamites likewise were the aggressor, occurred during the reign of En-entarzi, E-anatum's successor by two generations. According to a letter addressed to En-entarzi (Sollberger 1956 46, Enz. 1), a band of 600 Elamites conducted a raid

on the city of Lagash. Following the raid, the attackers tried to retreat to Elam with their loot. They were subsequently intercepted at the sea port of Gu'abba (= E-Ninmar) by the head of the temple household of the goddess of Ninmar, who defeated them in battle, managing to recover some of the looted goods. These Elamite invaders probably followed a sea route: from the Susiana over the Karun to the Persian Gulf, then along the coast to Gu'abba, from where they continued (probably also on ships) to Lagash. For Gu'abba, see below.

Apart from these two episodes, the only other case of a military conflict between Elam and Babylonia is documented in the inscription of an ED IIIb king of Kish named Enna-il, who claims to have defeated Elam (Frayne 2008: 75–76, Enna-il 1 and 2).

The existence of hostilities between Elam and Kish in ED IIIb times is further suggested by the “Sumerian King List” (henceforth SKL) lines 83–5, which alleges that En-mebaragesi, a member of the First Dynasty of Kish, “made the land of Elam to lay down its weapons”. However, since SKL’s coverage of ED times is practically devoid of any historical value, this information cannot be trusted. Moreover, this anecdote about En-mebaragesi is not included in the Ur III version of SKL (Steinkeller 2003), thus showing that it was a later (probably an Old Babylonian) addition.

Perhaps of greater significance is the fact that SKL lines 146–159 includes, between the First Dynasty of Ur and Second Dynasty of Kish, a separate Awan dynasty, assigning to it three kings (whose names are not preserved). While it is doubtful that, until the advent of Puzur-Inshushinak (see *Post-Sargonic Period*), Awan had succeeded in establishing any form of political hegemony over Babylonia, it is possible that it was an important Iranian polity already in Early Dynastic times. Here one notes the fact that the “Awan King List” (for which see *Sargonic Period, Introductory Remarks*) enumerates several rulers (kings nos. 1–7, the predecessors of Luhhishshan, the contemporary of Sargon) whose reigns – if indeed those were historical figures – would have belonged to the late Early Dynastic period. For the location of Awan and its role in later 3rd millennium history, see *Sargonic Period, Introductory Remarks*.

In this connection, one might also mention the figure of Lugal-anemunDU, whom SKL lines 205–210 lists as the sole king of the dynasty of Adab. Lugal-anemunDU is also the subject of an Old Babylonian literary composition (Güterbock 1934: 40–47), which ascribes to him the creation of an empire, extending from the Mediterranean to the Iranian plateau, and embracing within its scope the lands of Elam and Marhashi (the latter ruled by a governor named Migir-Enlil). But since the existence of such an Adab ruler finds no corroboration in any other data, one may confidently conclude that both Lugal-anemunDU and his alleged exploits are poetic inventions which were perpetrated sometime in Old Babylonian times (for reasons that completely escape us).

While the political contacts between Iran and Babylonia are documented exceedingly poorly, there survives extensive information on the commercial exchanges between these two

lands (Selz 1991). This information comes nearly exclusively from Lagash sources. These demonstrate the existence of a flowering trade between the city-state of Lagash and Elam, with the latter term denoting broadly Khuzestan and the abutting highlands. As shown by the data extant, commercial exchanges between Lagash and its eastern neighbors were conducted primarily over river and sea routes. A key element of this system was the seaport and ship-building center of Gu'abba (alternatively known as E-Ninmar), which, at least in the Ur III period, was also the site of a major textile-producing operation, probably the largest such center in the Ur III empire (Steinkeller 2013c; Laursen and Steinkeller 2017). Gu'abba was situated directly on the coast of the Persian Gulf, and was linked to Lagash and the other major urban centers of this city-state (Girsu, Nimin and Sirara) by a single waterway, named Id-Nimin^{ki}-še3-du, "Canal flowing to Nimin" (Steinkeller 2013c; Maekawa 2016; Laursen and Steinkeller 2017). From Gu'abba, the traffic proceeded along two main sea routes. The first of them skirted the Iranian coast to the mouth of the Karun river. From there it followed over the Karun into Khuzestan, from where the overland routes leading into southeastern Iran could be accessed. The city of Pashime (Mishime), which lay on the seacoast (see above n. 10), could be reached by the Lagash ships from Gu'abba directly. The other route commencing at Gu'abba, which was of equal importance, led to Tilmun (Failaka, Tarut, and Bahrain), and then, following the Iranian coast, to Makkan (Oman Peninsula and the coastal area of modern Abu Dhabi).

Through the use of the Lagash – Gu'abba – Karun connection, large quantities of barley and other commodities were shipped from Lagash to Khuzestan and the places situated further east. In the ED IIIb texts from Lagash, all these destinations are usually subsumed under the label "Elam". Particularly informative here is the tablet Nikolski 1 310 (date not preserved), which lists 14 individual shipments of merchandise that were sent to Elam by a group of Lagash merchants. Since the tablet makes no mention of Lagash officialdom, these individuals may have been independent businessmen who formed a merchant guild or a similar type of association. Some of the persons appearing in this text bear unmistakably foreign names (such as Budashir, Kakaritah and Ururimashak). These probably were "Elamite" partners of the Lagash traders. The merchandise included in these shipments consisted mainly of barley, with its total probably exceeding 500 bushels. The largest recorded shipment, in the amount of 120 bushels, was meant for the *ensik* of Arawa (who bore the good Sumerian name of Si₄-kug). Apart from barley, this shipment also included a quantity (one mina) of tin bronze. An even larger volume of barley exported to Elam is recorded in Nikolski 1 85, which, in this case, involved merchants working for the Lagash royalty. According to this tablet, the chief merchant of the ruler of Lagash named Lugal-anda transferred, in exchange for wool, 270 bushels of barley to his counterpart in employ of Lugal-anda's wife. The latter merchant transported it as merchandise to Elam.

Other Lagash exports named in Nikolski 1 310 are pig fat, perfumed oil, flour, wool and

silver. These commodities match closely the types of merchandise Babylonia exported to the Gulf region during the later 3rd millennium, especially to Tilmun and Makkan (Laursen and Steinkeller 2017). Although specific information is lacking, it appears certain that, during the period in question, Lagash was also an exporter of textiles, which were a major Babylonian export to those regions in Ur III times.

Among Lagash's imports from Elam one finds alkali and various types of spices. The former was imported in large quantities (75 and 60 bushels in RTC 20 and 21, respectively). Although timber is reported in only two instances (DP 423 and 486, which record deliveries of processed timber by two "sailors" from Elam), by analogy with the Ur III situation (see *Ur III Period*), its imports must have been very substantial. Two related texts from the reign of Lugal-anda (DP 370 and 371) mention a single delivery of the "flax of Susa", which probably denotes a variety of flax grown in Khuzestan. Interestingly, this flax appears to have come from Lugal-anda's subsistence fields in the city of Arawa. This suggests that, at that particular time, Lagash controlled Arawa politically. A possible corroboration of this is provided by the fact that, shortly earlier, a head of the temple household of Ningirsu named Dudu obtained a bituminous stone¹² from Arawa (Frayne 2008: 232–233, En-metena 28). Although this is the only mention of the imports of bitumen in Lagash documentation, it is certain that Khuzestan was the regular supplier of bitumen and related products to Lagash and other southern city-states during this period.

Somewhat surprisingly, in one instance one also reads of the purchase of a small number of cows from Elam (Nikolski 1 214). Much more common must have been imports of slaves, but only one such transaction is explicitly recorded (a group of blind men acquired in Uru-az; DP 339 viii:2). See also below for the slaves purchased in Der.

Indirect information on the commercial contacts with Elam is provided by the references to the Lagash merchants purchasing slaves, equids and spices in the border city of Der (DP 239, 513, and 516). Since this extremely important strategic point provided access both to Khuzestan and the Great Khurasan Road (Steinkeller 2013a: 306–307 and Figure 2), it is certain that the merchandise in question had originated in the Iranian highlands. Interestingly, one of these records (DP 516) differentiates between the "long distance trade in spices" and that involving slaves. This attests to the high degree of commercial specialization that existed in Iran at that time.

In summary, the final phase of the Early Dynastic period saw a great deal of contact between Khuzestan and the city-state of Lagash. This contact was mainly of a commercial nature, though it probably also involved significant population movements. One may be confident that the cities of Khuzestan had significant Sumero-Akkadian populations, and that there was a steady immigration of small numbers of "Elamites" into Babylonia, some of whom had been brought there as slaves. Although explicit textual evidence to that effect is lacking, it is highly probable that similar contacts existed between Khuzestan and its other

Babylonian neighbors, the city-states of Umma and Adab. The fact that the extant records do not mention any Iranian highland polities known from the later periods (such as Anshan, Sherihum and Marhashi) plausibly suggests that, in that period, the commercial penetration of Iran at the hands of Babylonians was confined to Khuzestan. Although it cannot be excluded that some Babylonian merchants occasionally ventured further east, it appears that the commercial exchanges with those highland centers (which probably were carried primarily over land routes, though some of them might have involved the use of sea connections – one thinks here especially of the merchants operating from Tilmun) were conducted and strictly controlled by the intermediary local traders.

Sargonic period (2350–2200)

Introductory remarks

The Sargonic territorial expansion in the east, which commenced under Sargon, the founder of the dynasty of Akkade, and continued through the reign of his grandson Naram-Suen, opened up a completely new phase for Elam's contacts with Babylonia. For the first time, the highland polities of Iran, such as Awan, Marhashi (Parahshum), Zahara, Sabum, Gar-NE-NE, Anshan, and Sherihum, make their appearance on the scene. Sargonic conquests in Iran also brought into contact with the Babylonian world at least three of Iran's eastern neighbors, Makkan, Kupin (probably the Pakistani portion of Baluchistan, see Steinkeller 2014a: 693, n. 8; Laursen and Steinkeller 2017) and Meluhha (the Indus Valley).

It is also in Sargonic times that we obtain first detailed information about Elam's rulers. Of particular importance here is the "Awan King List" (henceforth AKL) (Scheil 1932: iv). Composed at Susa in the Old Babylonian period, this unique source lists 12 Awan kings, the seventh and eighth of whom can be synchronized with Sargon (see *Sargon*). The reverse of the same tablet lists what is known as the "Shimashki King List" (henceforth ShKL), assigning to it 12 rulers. When viewed in its entirety, this document presumes to be a continuous listing of Iranian monarchs from late Early Dynastic times down to ca. 1850 BC. While the historicity of the Awan section is difficult to judge, its testimony about the kings of Shimashki appears to be generally reliable (Steinkeller 2014b: 288–290).

As discussed earlier, the toponym Awan is a *native* designation of the southeastern portion of Khuzestan, where the city of AdamDUN (modern Tépé Surkhegan in the vicinity of Shūshhtar) was situated (Steinkeller 2013a: 296–297). More broadly, Awan also described the adjoining highlands (roughly modern Fars), up to the borders of Marhashi (Parahshum) (for which see below). It is characteristic that the Sargonic sources never use Awan in that sense,¹³ consistently referring to the geographical area in question as Elam. This is demonstrated most visibly by one of Sargon's inscriptions, where two of the kings appearing in the AKL are

identified as the rulers of Elam (see *Sargon*). In view of these facts, Awan may be identified as the oldest surviving native designation of Iran's southwestern section. In this connection, note further the use of the title of the "king of Awan" by Puzur-Inshushinak (see *Post-Sargonic Period*).

Another Iranian polity that needs to be foregrounded here is the state of Marhashi (Parahshum), which, next to Elam (or Awan, if one uses the corresponding native term), was the main adversary of the Sargonic kings in the highlands. Marhashi continued to be an exceedingly important polity as late as the early Old Babylonian period. Based on the rich textual data bearing on this state, Marhashi may safely be localized in the modern province of Kerman, with its core area lying in the Halil river valley (Steinkeller 1982; 2013c; 2014a). To the west, Marhashi bordered on Elam, with the border between the two running somewhere in modern Fars. In the east, Marhashi's territory probably embraced the Bampur valley in the Iranian portion of Baluchistan. Its eastern neighbors (and political allies) were Kupin (probably the Pakistani section of Baluchistan) and Meluhha (the Indus Valley). To the south, its political influence extended all the way to the Persian Gulf and the Straits of Hormuz. In that area, Marhashi's neighbor and commercial partner was Makkan (Oman Peninsula and the coastal area of modern Abu Dhabi). It is possible that, at times, the coastal area of Iran actually was controlled by Makkan. This is suggested by the later history of this region, which shows that the Iranian littoral has always been intimately linked to Oman, with the two often being united under a single rule, and with Iranian and Omani populations migrating in both directions (Laursen and Steinkeller 2017).

Marhashi's importance extended to international trade, since it served as a key transshipment point of goods exported from Afghanistan and Meluhha to Mesopotamia and the places situated further west (such as gold, tin, lapis lazuli and carnelian). Marhashi was also an acknowledged producer of decorated stone vessels made of chlorite (probably *duḥšû* in Akkadian, see Steinkeller 2013c: 263–266), which it exported throughout the region (as far as northern Syria). Some of these exports date to the ED II period (see *Early Dynastic Period*), attesting to the great antiquity of the economic exchanges between this part of Iran and Babylonia.

In conclusion of these general remarks, it should further be noted that the Sargonic period also provides us with the first extensive list of Elamite deities and the earliest record of the Elamite language (written in Babylonian cuneiform). In both cases, the source of information is the so-called Treaty of Naram-Suen (Scheil 1911: 1–11). This exceedingly important source names, in its beginning section, ca. 37 deities (Scheil 1911: 3, Figure 1, i:2 – ii:12). Included among them are some of the most important Elamite gods known from later periods, including Inshushinak, Narundi, Nahhiti (Nahhunte), Pinikir, Simut, Humban, Hutran, Siashum and Napir.¹⁴ For the historical significance of this document, see *Naram-Suen*.

Sargon

Sargon's conquest of southern Babylonia culminated in his capture of Gu'abba (E-Ninmar), which, as described earlier, served as Babylonia's main seaport and its access point to the Gulf region and southeastern Iran. It was apparently from there that, through the use of the Karun connection, Sargon invaded Khuzestan, capturing Susa, Arawa (Uru'a) and Sabum¹⁵ (Frayne 1993: 22–26, Sargon 8 and 9).¹⁶ The possession of that whole region put him in a direct conflict with Elam and Marhashi. Either in the course of an offensive campaign or simply defending his position in Khuzestan, Sargon faced the united armies of Elam and Marhashi in battle, defeating them soundly. Sargon's Elamite adversaries in this engagement were the king of Elam named Hiship-rashiNI, his son Luhhishshan and a "governor" (**ensik**) of Elam named ShaNAM-simut. The first two of them, who appear to have led the enemy coalition, may plausibly be identified with Hishep-rater and Luhhishshan, the ninth and eighth kings of the Awan dynasty, respectively (according to AKL). Among their Marhashian allies were Dagu, a brother of the king of Marhashi, two "generals" (**šagina**) named Ulul and Shidga'u, as well as a "judge" of Marhashi named Kundupum. On this occasion, Sargon also captured (or recaptured) and looted various cities. Some of those were located in Khuzestan (Susa, Arawa and Awan), while others appear to have been highland polities (Sabum, Gar-NE-NE, Gunilaha, Shali'amu, Bunban and HeNI).¹⁷

Importantly, the enemy coalition defeated by Sargon included a "governor" of Sherihum, a polity or city that appears to have been situated on the coast of the Persian Gulf. This localization of Sherihum is indicated by the fact that it was from there, apparently, that during the reign of Manishtushu (see *Manishtushu*), the Akkadians sent an amphibious expedition against Makkan. It is possible, therefore, that, following his victory over the armies of Elam and Marhashi, Sargon campaigned in the highlands, reaching eventually Sherihum and the coast of the Persian Gulf. However, even if that was the case, it is unlikely that he had penetrated the territories of Marhashi on that occasion.

Sargon's inscriptions further report that he "crossed (the Lower Sea) and defeated Makkan (which is) in the middle of the Lower Sea" (Wilcke 1997: 25, J x:15–23, 28). This expedition may have followed the route later used by Manishtushu (see section *Manishtushu*). Alternatively, Sargon's military fleet would have traveled to Makkan directly from Babylonia, by using the port of Gu'abba as an embarkation point. Be that as it may, it is clear that, already under Sargon, there existed a maritime connection between Babylonia and Makkan, since in two of his inscriptions Sargon claims to have brought the ships of Meluhha, Makkan and Tilmun to Akkade (Frayne 1993: 27–31, Sargon 11 and 12).

Rimush

Sargon's conquest of Khuzestan and his successful military operations on the Iranian plateau precipitated, probably on the news of his death, an invasion of Khuzestan by the armies of Elam and Marhashi (Frayne 1993: 51–58, Rimush 6, 7, and 8). This new anti-Akkadian coalition, which was much larger than that which Sargon had faced earlier, apparently was led by Marhashi, since the enemy army included troops provided by Marhashi's eastern neighbors Kupin and Meluhha. Moreover, the pertinent sources assign to Marhashi a dominant role in this conflict. Another member of this coalition was the land of Zahara, whose location is unknown.¹⁸ Its leaders included a king of Marhashi named Abalgamash, his "general" Shidgau (who had been one of Sargon's opponents in the latter's war on Elam and Marhashi), a king of Elam named Emah-shiNI (who cannot be identified with any of the Awan kings appearing in the AKL) and a "general" of Zahara named Shargapi. As far as the events may be reconstructed, after the troops of Zahara, Elam, Kupin and Meluhha had assembled in Marhashi, Abalgamash led them and his army to Khuzestan, successfully occupying it. In response, Sargon's son and successor Rimush launched a counteroffensive, defeating the enemy army in a battle that was fought "between (the city of) Awan and Susa, on the 'middle river'" (where the Karun apparently is meant, see Steinkeller 2013a: 297). Although these figures may be exaggerated, Rimush claims to have killed 16,212 enemy soldiers, taking 4,216 prisoners on this occasion. In addition, he reportedly brought to Babylonia a booty consisting of 30 minas of gold, 3,600 minas of copper, 300 slaves, as well as various vessels made of diorite and *duhššu* stone (probably chlorite). Importantly, Rimush's inscriptions state that, through this victory, Rimush "removed the roots of Marhashi from Elam". This idiomatic statement, which has parallels in the Neo-Assyrian royal inscriptions, signifies that Rimush put an end to the political influence that Marhashi had earlier enjoyed in Elam (Steinkeller 1982: 257). The same sources further say that Rimush destroyed a number of Elamite cities. This suggests that, following the battle in question, he extensively campaigned in the highlands. As in the case of Sargon's military feats in that region, there is no clear indication that Rimush invaded Marhashi's territories.

Manishtushu

Rimush's victory over Elam and Marhashi put Akkade in firm control of Khuzestan and significant portions of the Iranian highlands. This situation continued during the reign of Manishtushu, Rimush's brother and follower. An eloquent proof of this is the figure of Eshpum, who served as Manishtushu's "governor" of Elam (Frayne 1993: 304–305, Eshpum 1 and 2001), and who dedicated, for the intention of his master's life, a votive statue of himself to the goddess Narundi in Susa (Frayne 1993: 81–82, Manishtushu 2001) (see [Figure 10.2](#)).¹⁹

It was evidently these stable conditions that enabled Manishtushu to expand Akkade's political and commercial influence further east. The longest surviving inscription of

Manishtushu describes how he conquered the lands of Anshan (modern Tall-e Malyan) and Sherihum (probably situated on or in the vicinity of the Persian Gulf), subsequently sending his ships (apparently from Sherihum) across the “Lower Sea” to Makkan (Frayne 1993: 74–77, Manishtushu 1). This amphibious expedition, which seems to have replicated an earlier such venture by Sargon (see *Sargon*), resulted in the capture of 32 Makkan “cities” and their rulers. On this occasion, Manishtushu also mined diorite in Makkan’s quarries, transporting it subsequently as booty to Babylonia.

Naram-Suen

The unusually long reign of Naram-Suen (54 and a half years), Manishtushu’s son and successor, represented a high point in Akkade’s history. The peaceful and stable conditions that characterized the reign of his predecessor continued to prevail during the first two or three decades of Naram-Suen’s tenure, until the entire empire – including most of Babylonia – rose in rebellion against Akkade and its king. It appears virtually certain that one of the areas affected by this rebellion (usually referred to as the “Great Revolt”) was Khuzestan and Elam, and that these regions regained independence temporarily. Later literary sources name among the participants of the “Great Revolt” a king of Marhashi named Humpshumkipi and a king of Makkan named Manum (obviously the same person as Mani’um, the ruler of Makkan whom Naram-Suen defeated sometime after the “Great Revolt”, see below), as well as the rulers of Elam and Meluhha (Westenholz 1997: 238–257, Texts 16B and 17). This information is not corroborated by the contemporary records, and thus may be fictitious. Nevertheless, it is possible that the narratives in question preserve a correct tradition that all of Akkade’s eastern territorial acquisitions had temporarily been lost to it during the “Great Revolt”.



Nearly miraculously, Naram-Suen emerged victorious from this ordeal, re-establishing his rule over Babylonia. Although the specifics remain unknown, it appears that he was also able to recover most (if not all) of Akkade's foreign possessions. This is shown by the fact that, following the "Great Revolt", he expanded the scope of Akkadian expansion even further by launching expeditions to the lands previously untouched by it (especially in the northeast). As for Khuzestan and Elam, we can be certain that these territories had been fully restored to Akkade. Our evidence here is the Akkadian economic sources found at Susa. Dating to the reigns of Naram-Suen and Shar-kali-sharri, these records demonstrate that the Akkadians were in firm control of Susa and other Khuzestani urban centers during that period. In addition, in an inscription written after the "Great Revolt", Naram-Suen claims to have ruled over the entire land of Elam "as far as Marhashi" (Frayne 1993: 129–131, Naram-Suen 25). Since one of his sources refers to Naram-Suen as a conqueror of Elam (Frayne 1993: 166–167, 2008), he may have campaigned there, especially during the "Great Revolt". But the specific information about these operations is lacking. The only surviving record of Naram-Suen's exploits in the east concerns his campaign against Makkan (Frayne 1993: 116–118, Naram-Suen 13). This expedition, which occurred subsequent to the "Great Revolt", resulted in the capture of Makkan's ruler, named Mani'um. Like Manishtushu before him, on this occasion Naram-Suen mined diorite in Makkan, fashioning out of it a statue of himself.

During the reign of Naram-Suen, Akkade's influence in Iran reached its apex. By its end, the Akkadians remained in firm control of the entire Khuzestan and of the bordering highlands as far as the borders of Marhashi. They also exercised a modicum of control over Makkan. The status of the central Zagros at that time is less clear. It is possible that Naram-Suen held some parts of it,²⁰ but we lack confirmation of that.

One of the foreign areas conquered by the Sargonic kings that was particularly closely integrated into the empire was Khuzestan. Akkade's control over Khuzestan may have even amounted to its outright annexation to Babylonia, with the cities of Susa, Arawa and Uru'az having been put under the charge of Akkadian appointees. Since there existed the position of a "general of the land of Elam", which appears to have been held by the "governor" of Susa (as shown by the case of Epir-mupi, for whom see section *Post-Sargonic Period*), it is likely that the Akkadians also held the mountainous section of the state of Awan, possibly as far as the borders of Marhashi.

The Sargonic economic texts from Susa, which, based on their script and shapes, date to the reigns of Naram-Suen and Shar-kali-sharri, paint a picture of a highly Babylonized society. This affects both Susa's institutions and the ethnic makeup of its population, since most of the individuals mentioned in these sources bear either Akkadian or Sumerian personal names, with only a fraction of them being foreign (Elamite or otherwise). Susa's economic life was

dominated by a very large palatial organization, which was organized along native Babylonian lines, and employed well in excess of 1,000 individuals (MDP 14 6, 9, 11, 12, 18, 24, 25, 26, 30, 32, 42, 51, 62, and 71). Susa also housed a large military garrison. The activities of the latter institution are documented in a number of sources, which record assignments of grain and field allotments to soldiers and expenditures of weapons and armor on their behalf (MDP 14 10, 47, 72, 85, and 86). The Babylonian influence at Susa extended to culture and religion, as reflected in the veneration of Akkadian and Sumerian deities, and the discovery there of Sumerian lexical texts and Akkadian incantations.

During the period in question, Susa maintained close economic contacts with southern Babylonia and other parts of the empire. For example, one reads of large volumes of barley coming from Apishal in the Umma province and from Arawa (MDP 14 21); of field operations in Umma, Zulum (in northern Babylonia?), and Awal (MDP 14 16 and 33), the last being situated in the Diyala region; and of the Amorites and the soldiers or workers stemming from Marhashi (MDP 14 18).

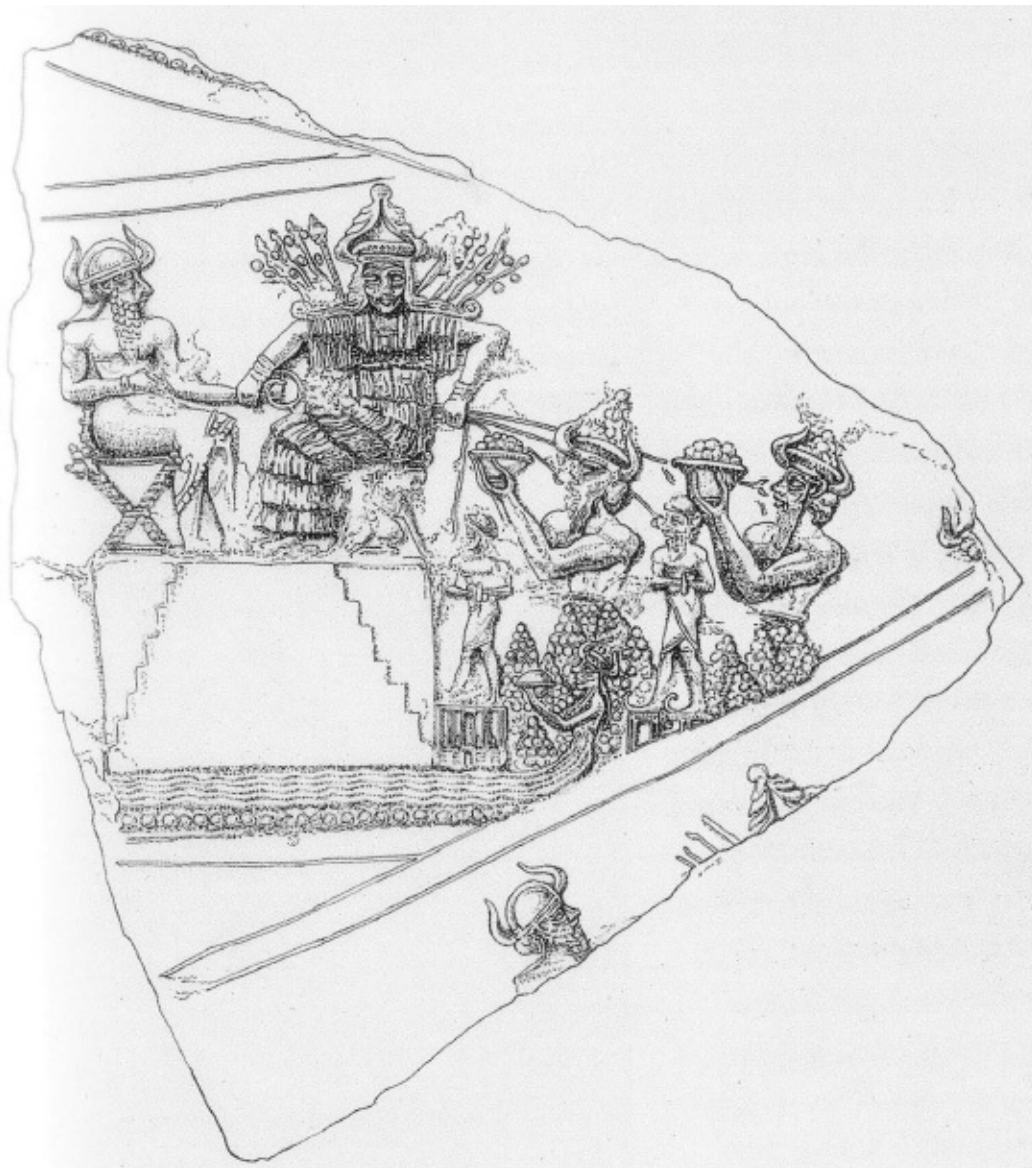
A particularly interesting record discovered at Susa is the above-mentioned text, written in Elamite, which names Naram-Suen (at least nine times) and Akkade (at least three times), and contains a long list of Elamite deities (Scheil 1911: 1–11). Although this document has been explained as a treaty between Naram-Suen and an unnamed ruler of Awan (Hinz 1967), this interpretation is most unlikely. An agreement of this type would be expected to show a symmetrical pattern, giving equal recognition to both parties. But such an organization is lacking in the text, since it nowhere mentions an Elamite ruler, and it does not refer to any important Babylonian deities (such as Enlil, Ishtar, Ea, Suen, Shamash, Ninhursag and Adad), except for Ilaba, Ninurta, Ninkarak and Ishhara.²¹ Such an interpretation is improbable also for historical reasons. If, as argued above, during the reign of Naram-Suen, Khuzestan and Elam were directly ruled by the empire, there did not exist at that time any independent Awan ruler with whom Naram-Suen could have concluded a treaty, nor was there a need for such a formal arrangement. Due to the enormous linguistic difficulties presented by this text,²² its exact function remains unknown. One of the possibilities is that we find here a record of privileges bestowed by Naram-Suen upon the chief gods of Susa and of their recognition of Naram-Suen as their servant and protector.

However, it is virtually certain that international treaties were a common practice in Sargonic times, but those must have involved independent states. Thus, one may conjecture that such an agreement had been concluded between Akkade and Marhashi. At the very least, we have the record of a dynastic marriage between these two states, which, apparently, involved a Marhashian princess and a son of Naram-Suen (Steinkeller 2014a: 692).

Finally, one may note a remarkable piece of art dating to Naram-Suen's reign (Hansen 2002; Steinkeller 2014a: 695–696), which likely depicts the rulers of Elam and Marhashi and their respective gods (see [Figure 10.3](#)).

Shar-kali-sharri

During the reign of Shar-kali-sharri, Naram-Suen's son and successor, the fortunes of the empire began to decline, and the slow process of disintegration had set in. It appears virtually certain that already in the second half of Shar-kali-sharri's long reign (26 years) Akkade lost effective control of all of its foreign territorial possessions. The only mention of Elam during Shar-kali-sharri's reign comes from one of his year formulae, which refers to a battle won against Elam and Zahara (Gelb and Kienast 1990: 54, D-25 and D-26). Since this battle took place on Babylonian soil (at Akšak in the Diyala Region), this must have been a defensive operation. This event is a clear indication that, already then (the exact placement of the date-formula within Shar-kal-sharri's reign unfortunately cannot be determined), both Khuzestan and the Iranian highlands had been free of Akkadian political domination.



[Figure 10.3 The roundlet of Naram-Suen \(after Hansen 2002: 93, Figure 3\).](#)

Post-Sargonic period

The collapse of the Sargonic empire was followed by a period of unrest and political fragmentation. The century or less that had elapsed between the end of Shar-kali-sharri's reign and the advent of Ur-Namma of Ur (Steinkeller 2015; Sallaberger and Schrakamp 2015: 127–130) saw the rise in Khuzestan and Elam of a number of independent rulers. One of them (possibly the earliest one) was Epir-mupi, who styled himself as a “governor” of Susa and a “general” of the land of Elam (Scheil 1913: 5, no. 1:rev.2' – 4'; Frayne 1993: 306, Epir-mupi 1). Given his Akkadian name, chances are that Epir-mupi was an Akkadian appointee at Susa, whose tenure likely belonged to the reign of Shar-kali-sharri. But he must have become completely independent at one point, since in the seals of his servants he is given the title of *dannum*, “powerful” (Frayne 1993: 306–307; 2001–2002). This important title, which was coined by Naram-Suen subsequent to his deification, is a proof of both Epir-mupi's independence from Akkade and his ambitious political aspirations.

The career of Epir-mupi closely mirrors that of Puzur-Mama, who served as a “governor” of Lagash, in all probability during the reign of Shar-kali-sharri. After the Akkadian empire had collapsed, Puzur-Mama became fully independent, assuming the title of the “king of Lagash” (Volk 1992). The sole surviving inscription of this post-Sargonic ruler mentions, in a broken context, Susa and Gar-NE-NE (Frayne 1993: 271–272, Puzur-Mama 1). This suggests that a military conflict of some kind occurred between Lagash and those cities at that particular juncture, but its nature is unknown. Since Puzur-Mama appears to have been a contemporary of the aforementioned Epir-mupi, the Elamite party involved in that conflict conceivably was Epir-mupi, but this is merely a guess.

On purely chronological grounds, two other rulers that may have belonged to this phase of Elamite history are Hi'elu and Hita'a, whom the “Awan King List” names as the tenth and 11th kings of that dynasty, identifying them as the predecessors of Puzur-Inshushinak (for whom see below). Possibly, Hi'elu and Hita'a ruled, subsequent to the Akkadian collapse, over the mountainous sections of Awan. However, since we lack any other records or mentions of these two rulers, their historicity remains uncertain.

This period of political fragmentation, which resulted from the void left by the Sargonic collapse, undoubtedly saw the growth in Khuzestan and Elam of numerous other small polities and kinglets, but their names have not survived to our time. Toward the very end of this phase, a remarkable political figure took advantage of this situation, uniting Khuzestan and Elam, and subsequently conquering significant portions of Babylonia. His name was Puzur-Inshushinak, and he was a contemporary of Gudea of Lagash, and of Ur-Namma of Ur (Steinkeller 2013a: 293–303). Puzur-Inshushinak is listed as the 12 king of Awan in AKL. Significantly, Puzur-Inshushinak was a native Iranian, a proof of which is the Elamite name of his father. As far as it can be determined, Puzur-Inshushinak began his career as a ruler of

Susa. This is confirmed by the extensive body of monuments and inscriptions that he has left there. During that early phase of his political career, Puzur-Inshushinak used the titles of the “governor” of Susa and the “general” of the land of Elam, the designations earlier born by Epir-mupi. Sometime later during his reign, Puzur-Inshushinak launched a major military campaign in the Zagros, from as far as Huhnuri in the southeast (the area of Ramhormoz) to as far as of Kimash and Hurti in the northwest (both situated on the Hamadan plain). This campaign is described in considerable detail in one of his inscriptions (Scheil 1913: 7–16), which names some 80 captured locales (most of which are documented only here). As this inscription makes clear, the main targets of the campaign were the lands of Kimash and Hurti, which controlled the critical trade route that led from the Diyala region to central Iran (the later “Great Khurasan Road”) (Steinkeller 2013a: 304–312). From there Puzur-Inshushinak moved into the Diyala region and northern Babylonia, bringing them under his rule. Very revealingly, the same source also contains the first mention of Shimashki, alleging that, in recognition of Puzur-Inshushinak’s victories, an unnamed king of Shimashki paid obeisance to him. That ruler quite likely was Kirname, the first ruler of Shimashki mentioned in the ShKL (Steinkeller 2014b: 288–289).

Assuming that Puzur-Inshushinak’s conquests extended to southeastern Zagros (the mountainous areas of Awan and the area of Anshan), he had succeeded in uniting the entirety of western Iran as far as the borders of Marhashi. If one adds to this his (however temporary) possession of the Diyala Region and northern Babylonia, it will not be an exaggeration to conclude that Puzur-Inshushinak was not only the first native ruler to unite most of Iran but also creator of the first Iranian empire. It was as a result of these achievements, no doubt, that Puzur-Inshushinak claimed that the god Inshushinak gave him “four quarters to rule”, in which he obviously imitated the earlier achievements of Naram-Suen. At that point he also abandoned his earlier titles, replacing them with those of “the mighty one” (*dannum*) and the “king of Awan” (Steinkeller 2013a: 296). His use of the latter title is particularly striking, since it shows that Puzur-Inshushinak viewed himself as a native Iranian ruler.

However, Puzur-Inshushinak’s achievement, which to a large extent was made possible by the political fragmentation of Babylonia during Post-Sargonic times and the inability of its rulers to focus their attention toward the east, was short-lived. Also in Babylonia, various contemporaneous rulers made inroads toward reunification, most notably among them, Utuhegal of Uruk, Gudea of Lagash and Ur-Namma of Ur. It was the last of them who had been most successful, uniting southern Babylonia and, eventually, confronting Puzur-Inshushinak and expelling him from northern Babylonia and the Diyala Region. It is likely as a result of this victory over Puzur-Inshushinak that Ur-Namma was able to reconquer Susa (Marchesi 2013; Steinkeller 2013a: 298) and, along with it, probably the entire Khuzestan as well.

Although the chronological picture still remains somewhat unclear, it appears that another participant of the war on Puzur-Inshushinak was Gudea of Lagash, who may have even acted

as Ur-Namma's ally. As we learn from his records, Gudea campaigned against Elam and Anshan, succeeding in capturing the city of AdamDUN (Steinkeller 2013a: 298–302). That these operations were directed against Puzur-Inshushinak is demonstrated by the mention of the latter's kinsmen in two tablets dating to Gudea's reign. In all probability, these individuals had been brought to Lagash as prisoners of war.

Yet another individual who may have participated in the war on Puzur-Inshushinak, likely on the side of Ur-Namma and Gudea, is Kirname of Shimashki (Steinkeller 2014b: 289). Assuming that this is correct, the final outcome of this conflict was the partition of Puzur-Inshushinak's "empire" by the three victors, with Ur-Namma taking over northern Babylonia, the Diyala region, and Khuzestan, with Gudea acquiring the possession of AdamDUN and its general area and with Kirname inheriting the eastern portion of the Iranian highlands (including Anshan).

The final point that needs to be discussed in this connection is the so-called Linear Elamite writing, which survives mainly on the artifacts commissioned by Puzur-Inshushinak (Hinz 1969; see also Desset, Chapter 20 in this volume). Like the "Proto-Elamite" writing, this script too remains undeciphered. Its origins are unknown. Although it has been speculated that this script derives from the Proto-Elamite writing, such a possibility is highly unlikely. One should rather interpret it as an independent, late 3rd millennium invention, whose creation may have represented, at least in part, a patriotic reaction against Babylonia's political and cultural dominance over Elam during the Sargonic period. As such, the "Linear Elamite" would have been a fitting element of Puzur-Inshushinak's propaganda offensive. However, there is no proof that Puzur-Inshushinak had been responsible for the invention of this script, nor, even more so, that this event occurred at Susa. Here one notes the fact that objects inscribed with the "Linear Elamite" have been found also in Fars and Kerman, at the sites of Shahdad and Konar Sandal (Hinz 1969; 1971; Madjidzadeh and Pittman 2008: 81 and Figure 14). Of those, the specimen found in Fars (a silver vase with the representations of two women wearing *kaunakes*-like dresses) is typical of the art documented in southeastern Iran during the first half of the 2nd millennium BC. This geographical and temporal distribution of the "Linear Elamite" rather suggests that this script originated in the Iranian highlands, likely in the border area between Elam and Marhashi.

Ur III Period (2110–2000)

Whatever the specifics of the Puzur-Inshushinak episode may have been, it is positively known that already under Ur-Namma, the founder of the Ur III dynasty, Babylonia regained control of Susa and probably of the entire Khuzestan as well (see *Post-Sargonic Period*). However, it was only during the reign of Shulgi, Ur-Namma's son and successor, that the Ur III state embarked on a full-scale territorial expansion. Directed nearly entirely toward the east and

north, Shulgi's foreign conquests commenced around his 20th regnal year, reaching their culmination at the very end of his exceptionally long reign of 48 years. By Shulgi's death, Babylonia was in full control of the Trans-Tigridian zone as far as Urbilum (modern Erbil) and Shashrum (Tell Shemshara) in the north, and of the entire western Zagros as far as Huhnuri (the area of Ramhormoz) in the southeast. As a result of these conquests and the program of reforms that Shulgi instituted within Babylonia, a virtual empire had come into being. Although considerably smaller than the Sargonic precedent in terms of its geographical extent, the Ur III empire showed a much higher level of political and economic integration (Steinkeller forthcoming).

The foundations of the Ur III imperial design were political and economic alliances with four international powers of particular strategic importance to Ur. The powers in question were Marhashi and Anshan in the east, Mari (Tell Hariri) in the west and Shimanum (the upper reaches of the Tigris) in the northwest. By forming these alliances, Shulgi created a coherent international order in which the entire territory between eastern Iran and northern Syria was divided into clearly defined spheres of interest. Since at least three of them date to before the Ur III territorial expansion really took off, these alliances had clearly been designed as a strategic framework for the launching of the expansion itself.

The relationships with Marhashi and Anshan had been cemented by dynastic marriages, which took place in years Shulgi 18 and Shulgi 30, respectively. The alliance with Marhashi proved to be exceedingly firm and enduring, since it lasted without any apparent interruptions into the reign of Ibbsi-Suen, the last ruler of the dynasty. The partnership with Anshan had a more complicated history (Steinkeller 2007). The familial connection with Ur had not been sufficient to insure Anshan's loyalty, and so, after a military intervention in the years Shulgi 34–35, the rule over Anshan was transferred by Shulgi to the family of Yabrat (Ebarat) of Shimashki, who, as we see later, was one of the staunchest allies of Ur and, like the rulers of Marhashi, one of the pillars of the Ur III foreign policy. From then on, Anshan remained firmly on the Babylonian side, being ruled by a junior kinsman of Yabrat, who, very likely, was Yabrat's surrogate.

Another crucial element of Shulgi's imperial design was the creation of a system of defensive settlements within the conquered territories. This buffer, called *ma-da*, "periphery", in Sumerian, formed a belt running parallel to the Tigris and the Zagros ranges, and extending from Urbilum in the north to Pashime in the southeast. This zone, in many ways comparable to the Roman *limes*, was settled (at least in part) with Babylonian colonists. Those were provided with land allotments by the state, paid a special tax in exchange, and stood ready to provide military and other services.

In the southeast, the Iranian territories that were annexed to Babylonia as part of the *ma-da* belt included the Khuzestan and Deh Luran plains, plus the adjoining eastern territories as far as Huhnuri. The main Babylonian outposts there were Susa, Arawa, Pashime, AdamDUN, and

Sabum. Like the other settlements of the ma-da zone, these locales remained under the direct rule of Ur. A place that showed a particularly close level of integration with Babylonia was Susa, where significant agricultural areas were directly exploited by the governor of Girsu/Lagash and his administration (Maekawa 2016).

The primary access to this section of the ma-da belt was provided by the seaport of Gu'abba, which, apart from port facilities, housed a shipyard, a huge textile manufacturing operation and one of the largest and most important caravanserais of the empire (see also under *Early Dynastic Period*). Gu'abba was the starting point of a sea route that ran eastward along the coast to the mouth of the Karun river. From there it followed over the Karun deep into Khuzestan and the neighboring areas, where the cities of Susa, Arawa, Pashime, AdamDUN and Sabum were situated, and the overland-routes leading into southeastern Iran could be accessed. This route remained in constant use, with ships being sent regularly from Babylonia to provision the military settlers in Khuzestan and to bring back timber and other materials that the agents of the empire acquired in that region and in the neighboring Zagros zone. The same ships also transported back and forth Babylonian troops, messengers, merchants and various other state employees traveling on official business, as well as foreign soldiers, large numbers of whom were supplied by the various Iranian polities situated in southeastern and central Iran, among them most importantly the lands of Shimashki, Duhduhni, Anshan, and Marhashi.

Among the northeastern Iranian locales included in the ma-da belt were Shimurru, Lullubum, Kimash, Hurti, Harshi, and Shashrum (Steinkeller 2013a: 304–312 and Figs. 1–2). This section of the Central Zagros was of particular strategic importance, since it oversaw the commercial traffic over the Great Khurasan Road, which led into the central portions of the Iranian plateau and the lands beyond. Access to that region from Babylonia was provided by the Urusagrig – Der connection, with Urusagrig (situated on the Tigris to the northeast of Nippur) serving as the embarkation point for the messengers, military, and other types of royal personnel travelling to that section of the ma-da belt, as well as to the lands of Shimashki and other locales in central Iran (Steinkeller 2013a: 306–307 and Figure 2).

As a means of providing additional security for the annexed territories, the empire brought into its orbit a plethora of small states that bordered on the ma-da territory. Because of their large number and their inherent instability, these states presented a constant threat to the newly established order. It appears that most of these states were turned into the vassals of Ur. Their relations with Ur were regulated by treaties, which were sanctified by an oath of allegiance. The most important among these vassals were given Sumerian princesses in marriage. Another check on the vassal states was provided by the four strategic allies of Ur (Marhashi, Anshan, Mari, and Shimanum).

Among the vassals of Ur particularly prominent and numerous were those associated with the lands of Shimashki, which occupied the central portion of the Iranian plateau to the east of

the ma-da belt and extended all the way from the shores of the “Upper Sea” to the border of Anshan (Steinkeller 2014b: 291–295). The Ur III texts apply the name of Shimashki indiscriminately to some 16 polities and their respective populations. In the same sources, the individuals stemming from the Shimashkian lands are often designated as “Elamites” (**Elam**). However, although some of them may indeed have been Elamites, it is doubtful that this identification extended to all the Shimashkians, and that the people so designated formed a homogenous ethnic group. The most important of all the Shimashkian lands was the kingdom held by the family of Yabrat (Ebarat), which appears to have constituted the core – and probably also the original – area of Shimashki. Although its precise location remains unknown, Yabrat’s kingdom most likely was situated somewhere between Huhnuri (the area of Ramhormoz), and Anshan (Tall-e Malyan). However, a location further to the northeast, somewhere in the general area of Esfahan, is possible as well.

As discussed earlier (see *Post-Sargonic Period*), the earliest mention of Shimashki’s name appears in one of Puzur-Inshushinak’s inscriptions, which refers to an unnamed king of Shimashki. On chronological grounds and in view of other considerations, that ruler likely was Kirname, the first king of Shimashki listed in ShKL (Steinkeller 2014b: 288–289). But regardless of whether or not this is correct, and whether Kirname did in fact participate in the war on Puzur-Inshushinak (as hypothesized in Steinkeller 2013a: 302–303), it appears quite certain that the growth of the Shimashkian state had been a direct consequence of the disintegration of Puzur-Inshushinak’s “empire”.

The next member of Kirname’s dynasty documented in the Ur III sources is Yabrat (Ebarat), who is listed as the third king of Shimashki in ShKL (Steinkeller 2007; 2014b: 290). A loyal ally of Ur during the reigns of Shulgi and those of his immediate successors, Amar-Suen, and Shu-Suen,²³ Yabrat was able to carve out a large territorial state for himself. Most importantly, he came to control, apparently with the tacit approval of Shulgi, also the state of Anshan, which he ruled through surrogates. The particular value of Yabrat for the Ur III empire lied in the fact that he counterbalanced and provided an important check on other Shimashkian polities. As such, he was one of the most important strategic allies of the empire. There is a strong possibility that either Yabrat or one of his kinsmen married a daughter of Shulgi.

Another prominent Iranian vassal of Ur was Hulibar of Duhduhni (Notizia 2010). Although Duhduhni clearly was situated on the Iranian Plateau (as evidenced in the fact that the men stemming from there are regularly designated as *Elam*), its location is unknown.²⁴ During the reigns of Shulgi, Amar-Suen and Shu-Suen, Hulibar provided Babylonia with large numbers of soldiers, and even visited Babylonia himself. He also married a Sumerian princess. A reflection of the close relationship that Hulibar shared with the House of Ur is the fact that a statue of Shu-Suen was erected in Duhduhni sometime during that ruler’s reign (RTC 390). Since Hulibar is never identified as a Shimashkian in the surviving documentation, it appears that his state did not count among the Shimashkian lands.

The reign of Amar-Suen, Shulgi's successor, represented the high point of the empire's fortunes. Amar-Suen's efforts concentrated mainly on political and economic consolidation, both within the core area of the empire and within its periphery. Except for some policing actions (carried out against Urbilum, Shashrum, and Huhnuri), there were no further attempts at territorial expansion. During the reign of his successor, Shu-Suen, the process of decline had set in, with the Babylonian rule over the periphery having been challenged on several fronts. In Iran, the most serious challenge came from a group of Shimashkian principalities, which formed an anti-Ur coalition led by the land of Zabshali. In response, in his sixth regnal year Shu-Suen launched a massive military campaign against Zabshali and its allies. In this undertaking, he seems to have enjoyed the support of Yabrat, who either fought on the side of Ur or at least remained neutral in the conflict. Shu-Suen's campaign was a success, with several of the Shimashkian lands having subsequently been incorporated into the ma-da belt. But Shu-Suen's victory was short-lived. Only a few years later, in the very beginning of the reign of Ibbi-Suen, the last king of the dynasty, Babylonia lost the control of most of its foreign possessions. With this development the empire effectively ceased to exist. Sensing that the end of Ur was near, Yabrat turned against Ibbi-Suen and occupied Susa and the rest of Khuzestan (Steinkeller 2007: 228). Although Ibbi-Suen made some attempts to regain the momentum, allying himself with Zabshali, the arch-enemy of Shu-Suen, and even sending an expedition to AdamDUN, these efforts were in vain. The Ur III state (or what was left of it) lingered for two more decades, during which Yabrat's son Kindattu (the sixth king of Shimashki according to ShKL) brought under his rule Anshan and probably most of western and central Iran. Kindattu also tried to ally himself with Ishbi-Erra, an erstwhile governor of Isin who had established himself in the meanwhile as an independent lord of the northern half of southern Babylonia (Steinkeller 2008; forthcoming). The final blow to Ibbi-Suen was delivered by Kindattu, who captured Ur and carried Ibbi-Suen as prisoner to Anshan. Through this accomplishment, Kindattu replicated – and probably even surpassed – the earlier feats of Puzur-Inshushinak, thereby becoming the second Iranian in history to submit Babylonia to his rule. This achievement was brief, however, since after some 20 years Ishbi-Erra succeeded in chasing the Shimashkians out of Ur and southern Babylonia. But the power of the Shimashkian rulers had scarcely been affected by their loss of Babylonia, since, during the following two centuries, they gained control over all of Iran, probably even bringing under their rule the territories of Marhashi, and extending their influence as far as Afghanistan and Bactria. Because of this, Shimashki may rightly be considered the first true Iranian empire. But that phase of Elam's history falls beyond the scope of the present chapter.

Abbreviations

- BIN 8 Texts in Hackmann, G.G. 1958. *Sumerian and Akkadian Administrative Texts from Predynastic Times to the End of the Akkad Dynasty*, Babylonian Inscriptions in the Collection of J.B. Nies 8. New Haven: Yale University Press.
- CAD *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*. Chicago: The Oriental Institute of the University of Chicago, 1956–2010.
- CUSAS 26 Texts in Westenholz, A. 2014. *A Third-Millennium Miscellany of Cuneiform Texts*, Cornell University Studies in Assyriology and Sumerology 26. Bethesda, MD: CDL Press.
- DP Texts in Allotte de la Fuÿe, F.M. 1908–1920. *Documents présargoniques*. Paris: Ernest Leroux, éditeur.
- HSS 3 Texts in Hussey, M.I. 1912. *Sumerian Tablets in the Harvard Semitic Museum. Part I*, Harvard Semitic Studies 3. Cambridge: Harvard University.
- MDP 14 Texts in Legrain, L. 1913. Tablettes de comptabilité, etc. de l'époque de la dynastie d'Agadê. In: Scheil 1913: 62–126.
- MSVO 1 Texts in Englund, R.K. and Grégoire, J.-P. 1991. *The Proto-cuneiform Texts from Jemdet Nasr*, Materialien zu den frühen Schrift zeugnissen des Vorderen Orients 1. Berlin: Mann.
- MVN 2 Texts in Sauren, H. 1974. *Wirtschaftsurkunden des Musée d'Art et d'Histoire in Genf*, Materiali per il Vocabolario Neosumerico 2. Roma: Multigrafica.
- Nikolski 1 Texts in Nikolski, M.V. 1908. *Dokumenty khoziaistvennoj otčetnosti*. . . , vol. 1. St. Petersburg.
- OAIC Texts in Gelb, I.J. 1955. *Old Akkadian Inscriptions in Chicago Natural History Museum. Texts of Legal and Business Interest*, Fieldiana: Anthropology 44/2. Chicago: Chicago Natural History Museum.
- OrSP 47–49 Texts in Schneider, N. 1930. *Die Geschäftsurkunden aus Drehem und Djoḥa in den Staatlichen Museen (VAT) zu Berlin*, Orientalia [Series Prior] 47–49. Rome: Pontificium Institutum Biblicum.
- RTC Texts in Thureau-Dangin, F. 1903. *Recueil de tablettes chaldéennes*. Paris: Ernest Leroux, éditeur.

Notes

- ¹ The reading [elam] of the sign in question (NIM) is assured by the surviving 3rd millennium syllabic spellings, such as **a-la-ma**, which interchanges with NIM in an Ur III tablet (MVN 2 152:2 and seal, line 2); and **e-lam** for NIM in a syllabic version of one of Gudea's inscriptions (Wilcke 2011: 40, iii:8'a). Note further the type of wood called *elammakku*, which is an Akkadian loanword of the Sumerian **elam-ak**, "one of Elam" (1 ^{giš}**banšur e-lam-ma-gum₂ ur₂-bi ha-lu-ub₂** (OrSP 47–49 37:1; Ur III; for other attestations, see CAD E: 75–76, s.v.); the Sargonic female personal name *E-la-me-tum* [*Elamītum*], "She of Elam" (OAIC 9:10); the spelling **nam-ga-eš₈ Elam-me-ne-kam** [*Elam-ene-ak-am₃*], "the long

- distance trade of the Elamites” (RTC 20 i:4; Urukagina’s reign); and *qá-aš-tum e-la-ma-tum*, “Elamite bow” (Dossin 1935: 182–183, line 17; Old Babylonian). Cf. Krebernik 2006: 64–67.
- 2 For example, three ED IIIb tablets from Lagash (Nikolski 1 11; HSS 3 15 (Pl. 23) x:2; DP 230 vii’:6–7, xiii’:5’ – 7’) mention several males and females labeled Elam(-**me**); most of them bear foreign, likely “Elamite” names. A contemporaneous tablet from Umma (BIN 8 68:45, 56) mentions two individuals marked as **Elam**^{ki}. Among the Sargonic attestations, note especially CUSAS 26 164, which lists several Elamites (**Elam**) and one man from Marhashi receiving “Elamite weapons” (**tukul Elam**).
 - 3 Krebernik 2006: 62. Hatamti may possibly appear already in the so-called “Naram-Suen” treaty (Scheil 1911: 9, Figure 2, vii:3: *ha-d[am?-ti?]*), but this reconstruction is by no means certain. For the source in question, see *Naram-Suen*.
 - 4 Steinkeller 1993: 111. Further indication that Inana was a chief deity of Susa at one early point in time is provided by the logogram used to write the name of Susa (ancient Shushin) – MUŠ₃.EREN – which is composed of the name of Inana (MUŠ₃) and the phonetic complement šuš_x(EREN) (Krebernik 2006: 69). Similar markers of the “Uruk Expansion” in the east may be the names of the Tilmunite deities Inzak and Ninsikila (Meskilak), which likewise are Sumerian words (Laursen and Steinkeller 2017).
 - 5 Potts (2016: 58) suggests that this borrowing may have happened later, but it is difficult (if not impossible) to think of any period after the end of the “Uruk Expansion” and before the Sargonic conquest of Khuzestan during which Inana’s cult could have been established at Susa, an event that could have only resulted from a strong Babylonian presence there.
 - 6 As shown by the shape of tablets, the arrangement of writing, and the use of sexagesimal counting system (Englund 2004).
 - 7 Another reflection of this cultural independence are the Proto-Elamite cylinder seals, which, though often impressed on Proto-Elamite tablets in the manner used in Babylonia, show characteristically different designs than those found on Late Uruk seals (Pittman 1992: 69–77).
 - 8 This toponym may appear already in an Uruk III tablet, which lists, among several slave women, 1 SAL+ZATU751 ELAM.KI (MSVO 1 217 iii:2).
 - 9 Another example here is a vessel fragment from Adab depicting a procession of musicians (Aruz 2003: 333–334, no. 230; Steinkeller 2013b: 267).
 - 10 Arawa (Uru’a) is probably to be sought in northwestern Khuzestan (Steinkeller 1982: 244–246). Pashime (Mishime), which was situated on the Persian Gulf, has positively been identified as the modern Tell Abu Sheeja, located 66 km north of Amarah (Steinkeller 1982: 240–243; Hussein et al. 2010).
 - 11 Another related battle, involving Akshak, Kish and Mari, was likewise fought within Lagash’s territory, at a place called Antasura.
 - 12 This stone, which was extensively used in 3rd millennium Susa and other Khuzestani sites to produce vessels, bas-relief plaques and other types of objects, has recently been identified as a naturally occurring rock from the Middle Jurassic Sargelu formation in northern Iraq and Iran (Connan 2012: 156–117). Previously, it was thought that it is a synthetic compound of bitumen mixed with ground calcite and quartz (Deschesne 1992).
 - 13 Awan is mentioned only twice in Sargonic sources, in both instances referring to a specific locale, which may be identical with the later city of AdamDUN (Frayne 1993: 22–24, Sargon 8, Caption 15; 51–58, Rimush 6:37–42 = Rimush

7:13–18 = Rimush 8:12–14).

- [14](#) The goddess Narundi is named also in an inscription of Manishtushu's official Eshpum (see *Manishtushu*).
- [15](#) Probably situated in the highlands, southeast of Khuzestan.
- [16](#) Sargon's conflict with Arawa and Elam is also commemorated in two of his year-formulae (Gelb and Kienast 1990: 50, D-3 and D-4).
- [17](#) For Sabum, see n. 15. Except for Gar-NE-NE, which is also mentioned in an inscription of Puzur-Mama (see *Post-Sargonic Period*), and which is known to have belonged in Ur III times to the ma-da peripheral system (see *Ur III Period*), the remaining toponyms are documented only here.
- [18](#) The only other attestation of this polity is found in one of the year-formulae of Shar-kali-sharri (Gelb and Kienast 1990: 54, D-25 and D-26), according to which Shar-kali-sharri defeated the armies of Elam and Zahara near Akshak (in the Diyala region).
- [19](#) Bahrani (1992: 87) thinks that this statue is an ancient artifact, which Eshpum re-used for that purpose. More likely, however, it is a piece of local Susian art, which simply shows archaic features.
- [20](#) This is suggested by his victories over Lullubum (Frayne 1993: 143–144, Naram-Suen 31), which was situated in the central Zagros, and his victory over Abullat, a critical point in charge of the later Great Khurasan Road (Gelb and Kienast 1994: 331, D-66; Steinkeller 2013a: 310).
- [21](#) These are probably Babylonian hypostases of undetermined Elamite deities. The only exception here may be the war-god Ilaba, an erstwhile god of Akkade and one of the patrons of the Sargonic dynasty, who is mentioned, together with the deified battle standard (^dšu-nir), as a recipient of offerings in two Susa texts (MDP 14 51, vi:2–4 and 71, ix:7–8). Since these sources record the allotments of barley for the employees and animals of Susa's palatial organization (**e2-gal**), it is possible that this institution was specifically dedicated to Ilaba.
- [22](#) Hinz's (1967) restorations and translation are grossly overconfident, and so they cannot be relied on. Even more questionable is his reconstruction of the historical background of this inscription (Hinz 1967: 95–96), which may only be characterized as pure fantasy. For now, the sober assessment of this document offered by König (1965: 29, n. 7) still holds true: "Die Inschrift fällt völlig aus dem Rahmen aller sonst bekannten; ausserdem sind fast alle Verba nicht übersetzbar, Sprache und Schreibungen abweichend. An eine ganze Übersetzung ist nicht zu denken bis auf Versuche".
- [23](#) He is documented from year Shulgi 44 to year Shu-Suen 8.
- [24](#) In one instance, a group of Duhduhni soldiers is said to arrive from Anshan (Reisner 1901 204), suggesting that Duhduhni was Anshan's neighbor.

Bibliography

- Aruz, J. 2003. (ed.) *Art of the First Cities. The Third Millennium B.C. from the Mediterranean to the Indus*. New York: The Metropolitan Museum of Art.
- Bahrani, Z. 1992. Statue of Eshpum. In: Harper, P. et al. (eds.) *The Royal City of Susa: Ancient Near Eastern Treasures in the Louvre*. New York: The Metropolitan Museum of Art, 86–87.
- Connan, J. 2012. *Le bitumen dans l'antiquité au Moyen-Orient*. Paris: Editions Errance.

- Deschesne, O. 1992. Vessels of Bitumen Compound. In: Harper, P. et al. (eds.) *The Royal City of Susa: Ancient Near Eastern Treasures in the Louvre*. New York: The Metropolitan Museum of Art, 99–101.
- Dossin, G. 1935. Prières aux “Dieux de la nuit” (AO 6769). *Revue d’Assyriologie et d’archéologie orientale* 32/4: 179–187.
- Englund, R.K. 2004. The State of Decipherment of Proto-Elamite. In: Houston, S.D. (ed.) *The First Writing. Script Invention as History and Process*. Cambridge: Cambridge University Press, 100–149.
- Frayne, D.R. 1993. *Sargonic and Gutian Periods (2334–2113 BC)*, The Royal Inscriptions of Mesopotamia, Early Periods 2. Toronto: University of Toronto Press.
- . 2008. *Presargonic Period (2700–2350 BC)*, The Royal Inscriptions of Mesopotamia, Early Periods 1. Toronto: University of Toronto Press.
- Gelb, I.J. and Kienast, B. 1990. *Die altakkadischen Königsinschriften des dritten Jahrtausends v.Chr.*, Freiburger Altorientalische Studien 7. Stuttgart: Franz Steiner.
- . 1994. *Glossar zu den altakkadischen Königsinschriften*, Freiburger Altorientalische Studien 8. Stuttgart: Franz Steiner.
- Güterbock, H.G. 1934. Die historische Tradition und ihre literarische Darstellung bei Babyloniern und Hethitern. *Zeitschrift für Assyriologie* 42: 1–91.
- Hansen, D.P. 2002. Through the Love of Ishtar. In: al-Gailani Werr, L. et al. (eds.) *Of Pots and Plans: Papers on the Archaeology and History of Mesopotamia and Syria Presented to David Oates in Honour of His 75th Birthday*. London: NABU Publications, 91–112.
- Hinz, W. 1967. Elams Vertrag mit Narām-Sîn von Akkade. *Zeitschrift für Assyriologie* 50: 66–96.
- . 1969. *Altiranische Funde und Forschungen*. Berlin: Walther de Gruyter.
- . 1971. Eine altelamische Tonkrug-Aufschrift vom Rande der Lut. *Archaeologische Mitteilungen aus Iran* n.F. 4: 21–4.
- Hussein, A.M., Hussein, A.H., Thaher, A.K., Kadhum, M.H., Hashem, M., Taha, M.H., Altaweel, M.R. and Studevent-Hickman, B. 2010. Tell Abu Sheeja/Ancient Pašime. Report on the First Season of Excavations, 2007. *Akkadica* 131: 47–103.
- König, F.W. 1965. *Die elamischen Königsinschriften*, Archiv für Orientforschung, Beiheft 16. Graz: Selbstverlag des Herausgebers.
- Krebernik, M. 2006. Philologische Aspekte elamisch-mesopotamischer Beziehungen im Überblick. In: Kogan, L. et al. (eds.) *Babel und Bibel 3, Annual of Ancient Near Eastern, Old Testament, and Semitic Studies*. Winona Lake IN: Eisenbrauns, 59–99.
- Laursen, S. and Steinkeller, P. 2017. *Babylonia, the Gulf Region and the Indus: Archaeological and Textual Evidence for Contact in the Third and Early Second Millennia BC*, Mesopotamian Civilizations 21. Winona Lake, IN: Eisenbrauns.
- Madjidzadeh, Y. and Pittman H. 2008. Excavations at Konar Sandal in the Region of Jiroft in the Halil Basin: First Preliminary Report (2002–2008). *Iran* 46: 69–103.
- Maekawa, Kazuya 2016. Susa and Girsu-Lagaš in the Ur III Period. In: Maekawa, K. (ed.) *Ancient Iran: New Perspectives from Archaeology and Cuneiform Studies. Proceedings of the International Colloquium Held at the Center for Eurasian Cultural Studies, Kyoto University, December 6–7, 2014*, Ancient Text Studies in the National Museum vol. 2. Kyoto: Center for Eurasian Cultural Studies, Kyoto University, 53–91.
- Marchesi, G. 2013. Ur-Nammâ(k)’s Conquest of Susa. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological,*

- Philological, Historical and Geographical Perspective: Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*, Mémoires de la Délégation en Perse 58. Leiden: Brill, 285–291.
- Notizia, P. 2009. *I testi dei messaggeri da Ġirsu-Lagaš della Terza Dinastia di Ur*, NISABA 22. Messina: Dipartimento di Scienze dell'Antichità dell'Università degli Studi di Messina.
- . 2010. Ĥulibār, Duḥduḥ(u)NI e la frontiera orientale. In: Biga, M.G. and Liverani, M. (eds.) *ana turri gimilli: studi dedicati al Padre Werner R. Mayer, S.J. da amici e allievi*, Quaderni di Vicino Oriente 5. Roma: Università degli Studi di Roma “La Sapienza”, 269–291.
- Pittman, H. 1992. The Proto-Elamite Period. In: Harper, P. et al. (eds.) *The Royal City of Susa: Ancient Near Eastern Treasures in the Louvre*. New York: The Metropolitan Museum of Art, 68–77.
- Potts, D.T. 2016. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*, 2nd revised ed. Cambridge: Cambridge University Press.
- Reisner, G. 1901. *Tempelurkunden aus Telloh*, Mittheilungen aus den orientalischen Sammlungen 16. Berlin: W. Spemann.
- Sallaberger, W. and Schrakamp, I. 2015. Philological Data for a Historical Chronology of Mesopotamia in the 3rd Millennium. In: Sallaberger, W. and Schrakamp, I. (eds.) *Arcane III. History and Philology*. Turnhout: Brepols, 1–136.
- Scheil, V. 1911. *Textes élamites-anzanites. Quatrième Série*, Délégation en Perse, Mémoires 11. Paris: Ernest Leroux, éditeur.
- . 1913. *Textes élamites-sémitiques. Cinquième Série*, Mémoires de la Mission archéologique de Susiane 14. Paris: Ernest Leroux, éditeur.
- . 1932. *Actes juridiques susiens (Suite: n° 166 à n° 327)*, Mémoires de la Mission archéologique de Perse 23. Paris: Librairie Ernest Leroux.
- Selz, G.J. 1991. ‘Elam und Sumer’: Skizze einer Nachbarschaft nach inschriftlichen Quellen der vorsargonischen Zeit. In: *Mésopotamie et Elam, Actes de la XXXVI^{ème} Rencontre Assyriologique Internationale, Gand, 10–14 juillet 1989*, Mesopotamian History and Environment, Occasional Publications 1. Ghent: University of Ghent, 27–43.
- Sollberger, E. 1956. *Corpus des inscriptions “royales” présargoniques de Lagaš*. Genève: E. Droz.
- Steinkeller, P. 1982. The Question of Marḥaši: A Contribution to the Historical Geography of Iran in the Third Millennium B.C. *Zeitschrift für Assyriologie* 72: 237–265.
- . 1993. Early political development in Mesopotamia and the origins of the Sargonic empire, In: M. Liverani (ed.) *Akkad: the first world empire: structure, ideology, traditions. Proceedings of Conference held at the University of Rome ‘La Sapienza’ on December 5th to 7th, 1990*. Padova, 107–129.
- . 2003. An Ur III Manuscript of the Sumerian King List. In: Sallaberger, W., Volk, K. and Zgoll A. (eds.) *Literatur, Politik und Recht in Mesopotamien: Festschrift für Claus Wilcke*, Orientalia Biblica et Christiana 14. Wiesbaden: Harrassowitz, 267–292.
- . 2007. New Light on Šimaški and Its Rulers. *Zeitschrift für Assyriologie* 97: 215–232.
- . 2008. On Birbirrum, the Alleged Earliest-Documented *rabiānum* Official, and on the End of Ibbi-Suen’s Reign. *NABU* 2008/3.
- . 2013a. Puzur-Inšušinak at Susa: A Pivotal Episode of Early Elamite History Reconsidered. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspective: Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*, Mémoires de la Délégation en Perse 58.

- Leiden: Brill, 293–317.
- . 2013b. New Light on Marhaši and its Contacts with Makkan and Babylonia. In: Giraud, J. and Gernez, G. (eds.) *Aux marges de l'archéologie. Hommage à Serge Cleuziou*, Travaux de la Maison René-Ginouvès 16. Paris: Éd. De Boccard, 261–274.
- . 2013c. Trade Routes and Commercial Networks in the Persian Gulf during the Third Millennium BC. In: Faizee, C. (ed.) *Collection of Papers Presented at the Third International Biennial Conference of the Persian Gulf (History, Culture, and Civilization)*. Tehran: University of Tehran Press, 413–431.
- . 2014a. Marhaši and Beyond: The Jiroft Civilization in a Historical Perspective. In: Cerasetti, B., Lamberg-Karlovsky, C.C. and Genito, B. (eds.) 'My Life is Like a Summer Rose'. *Marizio Tosi e l'archeologia come modo di vivere. Papers in Honour of Maurizio Tosi for His 70th Birthday*, BAR International Series 2690. Oxford: Archaeopress, 691–707.
- . 2014b. On the Dynasty of Šimaški: Twenty Years (or so) After. In: Kozuh, M. et al. (eds.) *Extraction and Control: Studies in Honor of Matthew W. Stolper*, Studies in Ancient Oriental Civilization 68. Chicago: The Oriental Institute of the University of Chicago, 287–296.
- . 2015. The Gutian Period in Chronological Perspective. In: Sallaberger, W. and Schrakamp, I. (eds.) *Arcane III. History and Philology*. Turnhout: Brepols, 281–288.
- . forthcoming. The Sargonic and Ur III Empires. In: Bang, P.F., Bayly, Ch.A. and Sheidel, W. (eds.) *The Oxford World History of Empire*. Oxford: Oxford University Press.
- Volk, K. 1992. Puzur-Mama und die Reise des Königs. *Zeitschrift für Assyriologie* 82: 22–9.
- Westenholz, J.G. 1997. *Legends of the Kings of Akkade*, Mesopotamian Civilizations 7. Winona Lake, IN: Eisenbrauns.
- Wilcke, C. 1997. Amar-girids Revolte gegen Narām-Su'en. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 87: 11–32.
- . 2011. Eine Weihinschrift Gudeas von Lagaš mit altbabylonischen Übersetzung. In: George, A.R. (ed.) *Cuneiform Royal Inscriptions and Related Texts in the Schøyen Collection*, Cornell University Studies in Assyriology and Sumerology 17. Bethesda, MD: CDL Press, 29–47 and Pls. XXI–XXIV

CHAPTER ELEVEN

The old Elamite period



Luca Peyronel

Introduction

The period spanning from the end of the Ur III control over Susa to the beginning of the so-called Kidinuid dynasty in Elam roughly corresponds to the Middle Bronze Age (c. 2000–1600/1550 BC) and saw the alternation of the Shimashki dynasty and that of the grand regents of Elam (Sukkalmah, or Epartids, from the name of the probable founder, Eparti/Ebarti). It was a period in which Elam was fully independent, with firm control over the territories of south-western Iran, from the Zagros mountains to the Susiana plain, up to the shores of the Persian Gulf. But the heart of the kingdom was in Fars, with its ‘capital’ Anshan, identified as Tal-i Malyan in the Marv Dasht plain. At this time, Elam had a structured political framework, with the paramount authority represented by the *Sukkalmah*, flanked by the *Sukkal* of Elam (and Shimahski) and by the *Sukkal* of Susa. It probably also had other authorities who are less clear, with complex mechanisms of succession quite different from those of Mesopotamia that must have grown up within a confederation that united territories occupied by settled and nomadic peoples and tribes, finding a compromise between kinship forms and political hierarchies.

We know little of the equilibrium of this association, in the absence of explicit documents regarding the kingdom’s internal structure, but it probably had its roots in earlier times (the Awan Dynasty) and took shape during the period of military pressure applied by Ur III (Shimashki Dynasty). At least initially it was a subdivided state which contained a plurality of entities and powers but which undoubtedly developed into a more close-knit and stable structure during the Epartid Dynasty. It was a powerful kingdom that extended eastwards and possessed in the Iranian highlands an almost inexhaustible pool of resources; it opened onto the Persian Gulf, but was above all ready to play a leading role in the Mesopotamian arena. The latter aspect of Elamite politics is recorded almost exclusively by the scarce references in written sources, though these are indirect and come from the cities of Mesopotamia (Ur, Isin, Larsa, Babylon, Eshnunna, Mari), and virtually nothing is known about what happened on the

eastern front. The ease of penetration, especially in the region of Diyala (Eshnunna), where the influence exerted by Elam was at times very strong, reveals expansionist ambitions. A similar picture is obtained from documents from Mari dating to the time of Zimri-Lim, when the Elamite king Sheplarkak (Siwe-Palar-huppak) seems to have been the main power even in the Mesopotamian arena. Only Hammurabi of Babylon was able to contest this role, inflicting a crushing defeat on Elam, but retaliation came during the reign of his son Samu-iluna, when Kutir-Nahhunte I invaded the lands of Mesopotamia and even threatened the capital. Unfortunately, very little is known of the last phase of the dynasty, but references in texts to numerous princes who could rule simultaneously are evidence of the progressive disintegration of the internal political system, perhaps accentuated by a widespread crisis that also affected Mesopotamia during the 16th century BC and marks the passage from the Middle to the Late Bronze Age in the ancient Near East.

Chronology and terminology

The chronology of Elam during the Shimashki and Sukkalmah dynasties is constructed on the basis of historical synchronisms with Mesopotamia known from the period of Ur III onwards, which allow the sequence of Elamite rulers – built up using a variety of sources – to be tied into the historical events of the ancient Near East.

In this chapter, absolute dates are given according to the conventional Middle Chronology and the time span considered roughly corresponds to the Middle Bronze Age of Mesopotamia, between the fall of Ur (2004 BC) and Babylon (1595 BC). The so-called New Low Chronology, which moves the dates about one century forwards (respectively, 1911 BC and 1499 BC), proposed by the Belgian school on the basis of a revision of the stratigraphic sequences of Mesopotamian sites and of textual and astronomical data (Gasche et al. 1998; Warburton 2011), is not readily applicable to the sequences of Assyria, Syria and Anatolia, and convincing arguments have been advanced (based on both scientific date determinations and historical and epigraphical considerations) in favour of using the Middle Chronology (with possibly minor adoptions from the so-called Low-Middle Chronology) for the Old Assyrian rulers, the *kārum* of Kültepe/Kanesh and the kingdom of Mari (Bloch 2014; Manning et al. 2016). In recent studies on Elam, both Middle and Low Chronologies have been adopted. For example, the latest overview of Susa (Steve et al. 2002) and the most recent publications of Susian cuneiform texts (De Graef 2005; 2006) use the Low Chronology, whereas in the volume on history and philology in the interregional ARCANE series, the chapter on the Ur III and Susa Shimashki period employs – certainly for reasons of internal uniformity – the Middle Chronology (De Graef 2015), as too does the work on Elamite archaeology by D.T. Potts (1999 and new edition 2015). The chronology of Elam is dependent on that of Mesopotamia and itself furnishes no direct evidence that could be the basis for a choice. However, Vallat (2000)

considers the Low Chronology more suitable to explain the sequence of rulers subsequent to the latest synchronism of the Sukkalmah period (between Kuk-Nashur II and Ammi-saduqa of Babylon) and the earliest known for the Middle Elamite period (between Tepti-ahar and the Kassite ruler Kadashman-Kharbe; Cole and De Meyer 1999). Since the latter is reliably dated to c. 1400 BC (the Late Bronze Age is not affected by these different chronological options), the use of the Middle Chronology for Ammi-saduqa (1646–1626 BC) would give an interval of two-and-a-half centuries, which is too long to cover the sovereigns attested during this time span. However, this does not seem to be a compelling reason to prefer the Lower Chronology, since there is no proof that the sequence of the last Sukkalmah and Kidinuid kings is complete. At present, therefore, the Middle Chronology still offers greater uniformity throughout the Near East, allowing the available dynastic sequences, from the Levant to Elam, to be linked together without substantial problems.

The succession of the Awan, Shimashki and Sukkalmah dynasties furnishes a political chronological framework and permits correlation between Elam and the Akkad, Ur III and Old Babylonian periods in Mesopotamia. Independently of the use of a middle or low chronology, a tripartite division of the ‘Paléo-élamite’/‘Old Elamite’ period has been proposed (Vallat 1998; Steve et al. 2002) as follows:

Old Elamite IA-B = ED II-III and Akkad/Awan dynasty – c. 2800/2700–2100 BC

Old Elamite II = Ur III/Shimashki dynasty – c. 2100–1980/1950 BC

Old Elamite III = Old Babylonian/Sukkalmah or Epartides dynasty (c. 1980–1600/1550 BC)

In this general periodization of the 3rd and first half of the 2nd millennium BC, the Proto-Elamite phase (c. 3100–2800 BC) is followed directly by the beginning of the earliest phase of the Paléo-Elamite/Old Elamite. From a purely conventional perspective, the terminology of this division does not correspond to those in use in the Near East; it would perhaps be preferable to introduce an Early Elamite phase (in analogy with Early Dynastic/Early Syrian) and use the definition Old Elamite only from the end of Ur III; that is, from the beginning of the Middle Bronze Age.

In a historical periodization linked with Mesopotamia the Sukkalmah epoch may be divided into two macro-phases, roughly corresponding to the Middle Bronze Age, with possible sub-phasing on the basis of historical and archaeological criteria:

Middle Bronze I – Early Sukkalmah = Isin-Larsa – c. 1980/1950–1800 BC

Middle Bronze II – Late Sukkalmah = Old Babylonian – c. 1800–1600/1550 BC

It is not currently possible to propose an independent archaeological subdivision based on find classes (pottery to glyptics), stratigraphic seriation and radiocarbon datings, although the

stratigraphic sequence of Ville Royale A and B in Susa (B VII-V and A XV-XIII) may be correlated with the period of Shimashki and Sukkalmah on the basis of writings found in the various phases (Steve et al. 1980).

The division between the Early and Middle Bronze corresponds in the Mesopotamian periodization to the end of Ur III, while the onset of the Amorite dynasties (during the so-called period of Isin and Larsa), followed by the rise of the Old Babylonian kingdom, covered a time span of about four centuries (c. 2000–1600 BC), which saw the intense participation of Elam in Mesopotamian political events during the Shimashki and Sukkalmah dynasties (Charpin 2004). The history of politics and other happenings in the Elamite kingdom may be reconstructed almost exclusively from indirect Mesopotamian sources, connected by means of several decisive synchronisms, but very little is known of the political situation within the Elamite confederation, especially with regard to relations eastwards. It is thus largely an indirect history involving international manoeuvres on the chessboard of the Mesopotamian plain. Further strengthening this westward bias is the fact that almost all of the Elamite textual information comes from Susa, which was always largely oriented towards the Mesopotamian lowlands.

Epigraphic and archaeological sources

Written sources

Direct epigraphic sources pertaining to the Sukkalmah period are all written in Akkadian (only a few texts from Susa and Tal-i Malyan, a royal stela and some inscriptions on silver vessels of unknown provenance are written in the Elamite language: De Graef 2006: nos. 30, 82; Farber 1975; Mahboubian 2004: 44–49) and come from a small number of sites (Susa, Choga Gavaneh, Tal-i Malyan, Liyan) or the antiquities market. The most substantial and varied inventory is from Susa and is made up of cuneiform tablets, building inscriptions, seal legends and inscriptions on other artifacts. To the Sukkalmah epoch material must be added texts of the Sukkalmahs recopied by Middle Elamite kings and information given in Middle Elamite building inscriptions.

Lists and royal inscriptions

Whereas for the Shimashki dynasty a sequence of rulers is given in the Awan and Shimashki ‘Royal List’ from Susa (Scheil 1931; Gelb and Kienast 1990: 317–318), dated to the Old Babylonian period, we lack textual evidence of the dynastic sequence during the Sukkalmah epoch. However, a series of Old Elamite rulers are mentioned in the ‘Genealogy of Shilkak-Inshushinak’, a list of his predecessors drawn up by this king in the 12th century BC, of which

three different versions are known (König 1965: 110–115 no. 48). Shilkak-Inshushinak tells us that these sovereigns were known thanks to the discovery of inscribed bricks during restoration work on the religious buildings on the acropolis of Susa. Large numbers of building inscriptions relating to several rulers of Elam dating from the Shimashki (Idaddu-Inshushinak=Idaddu I, Tan-Ruhurater, Idaddu II) and Sukkalmah period (Kuk-Kirmash, Attahushu, Temti-Agun, Kuk-Nashur and Temti-halki) were in fact found in Susa; as well as providing valuable information about Susa's public buildings (which are virtually unknown archaeologically), they give important data on the members of the Epartid dynasty (Malbran-Labat 1995: 24–51 and Chapter 23 this volume; Potts 2010). Other royal building inscriptions come from Choga Pan West (a brick fragment of Temti-Agun; Steve 1987: no. 1), Tal-i Malyan (a brick of Siwe-palar-huppak and five other fragmentary bricks with portions of titulature; Stolper 1982: 57–61), and on the Persian Gulf coast at Tol-e Peytul/Liyan (an alabaster socle with a dedicatory inscription of Simut-wartash; Pézard 1914: 91, Pl. 13:4).

Seal legends and dedicatory inscriptions on other objects also give precious information, such as the owner's or dedicator's name, perhaps their occupation and in some cases a reference to the reigning sovereign. However, there exists no single inventory of these inscriptions, descriptions of which are to be found in numerous publications (Potts 2015: tab. 6.1). The catalogue of P. Amiet (1972, expanded by Amiet 1980), is fundamental for inscribed seals and sealings, whereas the epigraphic material (including glyptics) from Tall-i Malyan is still almost entirely unpublished.

Administrative and economic texts

Susa yielded more than 700 economic, administrative and legal documents written in Sumerian and Akkadian which can be dated to the end of the 3rd and the first half of the 2nd millennium BC (Lambert 1991; De Graef 2013). Most were found in the 20th century during R. de Mecquenem's excavations and published mainly by V. Scheil, with or without very general information on their context of discovery (Scheil 1908: nos. 1–124; Dossin 1927: nos. 67–249; Scheil 1930; 1932; 1933; 1939). Only for the tablets unearthed during Ghirshman's excavations of the Ville Royale (Steve et al. 1980: 119–133) are the circumstances in which they were found reliably known; an archaeological reference sequence covering the entire period from the Shimashki to the Sukkalmah dynasties is available. Those from Sounding B have been published recently (De Graef 2005; 2006; 2007).

Susa texts are mainly lists of household goods, various kind of loans and documents concerning the sale/purchase of various portable objects and property (houses and land). The documents never have a precise date formula (unlike the Ur III texts from the site, which specify the year of the king's reign), but the presence of inscribed seal impressions and references to high officials and rulers (as well as other prosopographical information) make

them an important source for the chronology of the Shimashki and Sukkalmah dynastic sequences (De Graef 2008a). The oath formulas of the economic/legal texts commonly include the names of rulers, often mentioned together with their successors or predecessors, and thus constitute the best source for building a relative chronological sequence, although there are gaps and the problem of homonymy.

A few unpublished administrative texts dated to the Kaftari period come from Malyan (Stolper 1982: 57), and the small archive of Choga Ghavaneh is the only other important textual source for this period. The latter may be dated to the 18th century and was found in a room (B15) of a partially excavated public (?) building. It consists of 56 administrative records (plus 26 fragments) related to husbandry and agriculture, with a predominance of lists of rations or persons, receipts or commodity supply records (Abdi and Beckman 2007). The site is located in western Iran, and might have been part of the area controlled by Elam near the boundary with Eshnunna, although the texts (written in Akkadian) do not mention the Elamites and personal names are overwhelmingly Akkadian, with a few Amorite names.

The presence of administrative and economic activities involving textual records are attested by a series of clay labels and sealings from Tepe Hissar in north-eastern Iran (Phase IIIC, c. 2200–1800 BC), showing that an area much larger than Khuzistan and Fars was probably incorporated in the Old Elamite realm, although it remains elusive and virtually unknown (Farokhnia and De Graef 2016).

Scholastic and mathematical texts

The considerable number of scholastic and mathematical texts discovered at Susa show the presence of a local scribal tradition during the Sukkalmah period (Malayeri 2013). The tablets found during de Mecquenem's and previous excavations (Dossin 1927, nos. 1–66; Van der Meer 1935; Bruins and Rutten 1961) can be dated on palaeographic criteria to the Old Elamite period, a chronology confirmed by the group of 30 tablets from stratified contexts in Ville Royale B VII-V (Tanret 1986).

'Funerary' texts

A small group of seven cuneiform texts comes from an area east of the Achaemenid palace of Darius at Susa in which several Elamite tombs were found by de Mecquenem between 1912 and 1914 (Steve and Gasche 1996; Tavernier 2013). They might be, therefore, related to this funerary context, associated perhaps with a vaulted tomb, and probably date to the very end of the Sukkalmah period. Their content shows the specificity of Elamite rituals concerning the netherworld, and they have been interpreted as a sort of guide for the dead to reach the place of final judgement by the Annunaki, the infernal gods.

Susian texts and inscriptions contain rulers' names, royal titles and useful data regarding political organization: dedicatory and royal inscriptions reveal aspects of ideology, cult and religion, while economic documents – several of which can be grouped into archives of families or officials – mainly refer to socio-economic structures and business activities. However, it must be recalled again that almost all the written sources of this period come from Susa, which was certainly a strategic center for the political control of an important part of the realm but was also deeply influenced by Mesopotamian culture and was only one – the westernmost – of the major Elamite urban settlements. The Sukkalmah probably resided also in Anshan, where it is likely that important 'central' archives were kept, but as yet nothing is known of what must have been the political centre of Elam. The archive of Choga Ghavaneh, on the other hand, provides an example of local administration that seems practically identical to that of Diyala (Eshnunna), although the town itself is in an area that at this time appears to have been under Elamite political control.

Another serious problem is that direct epigraphic sources are silent about historical events and lacking in interregional geopolitical references, and consequently our understanding of the period's history is mainly based upon those Mesopotamian texts that mention Elam.

Mesopotamian texts

Ur III texts shed light on the period of control over Susa and Susiana and on the kingdom's relations with eastern political entities and especially with Shimashki (Stolper 1982; Steinkeller 2007; 2014). Shimashkian rulers mentioned in the Shimashkian King List are attested in Ur III sources (Yabrat=Ebarti I, from Shulgi 44 to Shu-Sin 8, Kirnamme=Girnamme in Shu-Sin 4 and 5, Ta'azite=Tazitte I or II, in Amar-Suen 8 and Shu-Sin 2) and, after the fall of Ur, in a hymn of Ishbi-Erra (Kindattu) and in a text from Isin dated to Ishbi-Erra 16 (Kindattu and Idattu) (Quintana 1998). Royal brick inscriptions and seals from Susa attest a marriage between Tan-Ruhuratir and Mê-Kubi, daughter of Bilalama of Eshnunna (Peyronel 2013: 52–54), and the first year of his reign Iddin-Dagan of Isin reports an earlier wedding between his daughter, Mātum-niattum, and a king of Anshan, possibly Imazu, crown prince at the time of Kindattu (Vallat 1996b).

A variety of Mesopotamian sources from the Sukkalmah period contain historical references to Elam and Elamite kings that have been used to build up a very general outline of the relationship between Elam and Mesopotamia (Vallat 1996a; Potts 2015: 155–161). Two year names of Gungunum of Larsa (1932–1906 BC) allow the reconstruction of military campaigns against Pashime and Anshan (Sigrist 1990: 7), which perhaps resulted in a period of control over part of Elam, while later events point to greater Elamite involvement in Mesopotamian affairs. Thus, the Elamites were allied with Zambiya of Isin (1836–1834 BC) against Larsa (as mentioned in Sin-iqisham of Larsa year name 5: Sigrist 1990: 29) and in the period dominated

by the expansionist policies of Shamshi-Addu I of Assyria (1813–1781 BC or 1808–1776 according to the Old Assyrian eponym list: Bloch 2014) in the Trans-Tigridian and Zagros regions, the most significant references are in an epistolary text from Shusharra (Tell Shemshara in the Ranja Plain), where the local ruler reports to the king on activities of Shuruhtuh (= Siruk-tuh), king of Elam (Eidem and Lasseo 2001: 32–33). According to the ‘Assyrian Chronicle’ of Mari, Ipiq-Adad II of Eshnunna was defeated by an unnamed Elamite king (Birot 1985: 229 B 8), possibly the same Siruk-tuh of the Shemshara texts, and a broken stela from an unknown Iranian site records the names of a list of places conquered probably also by this king (Farber 1975).

The conquest of Larsa by Kudur-mabuk of Yamutbal (c. 1835 BC) gave rise to a dynasty (with his sons Warad-Sin, 1834–1823 BC, and Rim-Sin, 1822–1763 BC) which seems to be related in some way to Elam, since his father, Shemti-Shilhak, has a linguistically Elamite name (Henkelman 2010). It is not a surprise that texts from Larsa mention many individuals with Elamite personal names (Zadok 1987: 6–11), although they are not informative regarding possible Larsa-Elam historical connections, with the exception of a letter sent possibly by Rim-Sin to a Larsa official at the court of Eshnunna during the reign of Dadusha (1792–1779 BC), where it is said that ‘the great king of Elam’ was consulted in order to arbitrate a dispute (Rowton 1967: 269).

After the death of Shamshi-Addu of Assyria, the Elamite expansion in Mesopotamia became stronger, leading to the conquest of Eshnunna thanks to an alliance with Babylon and Mari. The archives from the latter kingdom at the time of Zimri-Lim inform us on these crucial years (Zimri-Lim 7–11; Charpin and Ziegler 2003: 206–230). They mention Siwe-palar-huppak (Sheplarkak), Kudu-zulush, as well as an anonymous Sukkalmah, who was probably the same Siwe-palar-huppak, and show intense diplomatic relations and commercial exchanges with Elam (Joannès 1991), then abruptly interrupted and followed by a phase of aggressive Elamite policy in Mesopotamia (Charpin and Durand 1991; Charpin 2013; Durand 1994; 2013).

The change in the situation is shown by a letter describing the oath of alliance between Hammurapi of Babylon and Zimri-Lim of Mari against Siwe-palar-huppak of Elam (Charpin 1990), and year name 13 of Hammurapi (1792–1750 BC) can be related to a victory against Elam and other allies (van Koppen 2013: 377). After the defeat of Elam by Hammurapi, few historical references are available: a year formula of Abi-eshuh (1711–1684 BC) attests another victory against Elam (van Koppen 2013: 377–379) and a text from Dilbat allows an important synchronism between Kuknashur (II) and Ammi-Saduqa I (1646–1626 BC) (Vallat 1993b). Late Old Babylonian administrative texts from Sippar dated to Ammisaduqa record Elamite slaves and soldiers at the service of the palace (De Graef 1999: 16–19), and in the cuneiform tablets from the First Sea-Land dynasty (Dalley 2009) there are also some references to Elamite messengers and Elamite people, but no mention of rulers. These texts are the latest

Mesopotamian sources – though poorly informative ones – concerning Elam in the obscure transition phase between the Old and Middle Elamite periods.

Archaeological sources

With regard to archaeological evidence too, there is heavy dependence on Khuzestan and Susa (Álvarez-Mon 2013). The settlement pattern of the Susian plain during the Old Elamite period has been outlined in the surveys carried out from the 1960s to late 1970s (Carter 1971: 173–185; Carter and Stolper 1984: 150): during the Shimashki phase, Susa is the only large town in central Khuzistan (with an estimated area of c. 50 ha), followed by Choga Pahn (c. 10 ha), ten medium-sized settlements or ‘small towns’ (4–10 ha) and nine small villages (0–4 ha). The Sukkalmah period was marked by a significant population increase: all sites of the previous period continued to be occupied, and 20 new villages plus one large site (>10 ha) appeared. Susa probably reached a maximum size of 85 ha, but very little is known of the city’s urban layout.

The Mianab plain and the ‘eastern corridor’ bridging central Susiana and Ram Hormuz have recently been surveyed, revealing a distribution of small settlements dating to the first half of the 2nd millennium BC (Moghaddam and Miri 2003: 102, Figure 5; 2007: 35, 38), and a similar situation has been observed in the Ram Hormuz (Wright and Carter 2003) and Izeh further south and east (Bayani 1979: 99–103).

The urban organization of Susa in the Shimashki and Sukkalmah periods is virtually unknown. Ghirshman’s excavations in the Ville Royale (Soundings A and B) brought to light two domestic quarters located at the southern and northern edge of the mound, with a long sequence of building phases well dated by the presence of seals and cuneiform tablets from the Ur III-Shimashki period to the end of the Epartides dynasty (Ghirshman 1965a; 1965b; 1967; 1968; Steve et al. 1980). During the Shimashki (B Level VII-VI)/Early Sukkalmah (B Level V and A Level XV) period, houses were smaller and less uniform with respect to the following phase (A Level XIV-XIII), when large dwellings were recorded, with rooms centred on paved internal courtyards, and blocks of buildings divided by a main street off which led a number of alleys.

Public buildings were probably concentrated on the Acropole, and perhaps also on the Apadana mound (Steve and Gasche 1990), which has been suggested as the possible location of the Elamite palace area (Ghirshman 1968: 6–7; Vallat 1999), though these were almost entirely eliminated by subsequent building activity. The presence of several temples dating to the Old Elamite period are indicated by inscribed bricks found on the Acropole; a well-preserved building excavated in the Ville Royale by de Mecquenem might be identified as a temple on the basis of six terracotta lions found nearby (de Mecquenem 1943a: 53–55).

Important evidence was provided by the discovery of a large number of burials and tombs,

in particular during de Mecquenem's excavation of the Apadana, Ville Royale (1 and 2) and Donjon (de Mecquenem 1943b). Unfortunately, the rather superficial published information does not permit reliable cross-referencing between all the tombs and grave goods, and above all does not allow the positions of the Ur III-Shimashki, Sukkalmah and Middle Elamite period tombs to be identified with certainty. However, it is possible to date the introduction of the bath-tub coffins during the Ur III period and their use especially at the beginning of the 2nd millennium BC, while the vaulted tombs, built with fired bricks and used for multiple/family(?) burials, might be assigned to a later Sukkalmah phase; they remained in use also during the Middle and Neo-Elamite periods.

In the Susiana plain, a few other Old Elamite sites have been investigated: a building with painted walls considered a fortress or temple was excavated at Choga Mish (Kantor 1977: 14), and a short season of archaeological research was conducted at Tepe Sharafabad, a small village founded during the Sukkalmah period where an inscribed seal and a fragmentary cuneiform tablet were retrieved in association with some dwellings (Schacht 1975). A Sukkalmah phase at Haft Tepe has been only recently recognized, as well as the presence of Middle Elamite building levels preceding occupation in the time of Tepti-ahar (Mofidi-Nasrabadi 2014: 102–106; 2015; 2016: 97–98, tab. 1). The earliest settlement evidence comes from the trench IV, and ongoing excavation will surely shed more light on this crucial phase in the history of Elam.

The regions north of Susiana have revealed a considerable number of settlements occupied during Old Elamite times, although few extensive excavations yielded architectural remains and stratified contexts with in-situ material (Potts 2013). In the Deh Luran plain, a rampart dating to the Middle Bronze Age was discovered at Tepe Farukhabad (Wright 1981: 196–199, 219–221), and some other settlements of the period have been identified by surface finds (Wright and Neely 2010: 14–15).

Late 3rd and early 2nd millennium levels in Luristan are attested at Godin Tepe (III: 4–1), Tepe Giyan, Kamtarlan, Chiga Sabz and several other sites (Henrickson 1984). A building discovered at Choga Ghavane can be dated to the Middle Bronze Age thanks to the presence of a small archive of cuneiform texts; it constitutes the most significant evidence for the existence of small administrative centres in the region (Abdi and Beckman 2007). Early Bronze Age graveyards located along the Zagros and in Pusht-i Kuh (e.g. Kalleh Nisar; Haerinck and Overlaet 2008) also show continuity of use during the early centuries of the 2nd millennium BC.

In Fars, survey work conducted in the River Kur Basin has furnished data regarding the growth of settlement during the Early and Middle Bronze Age (Banesh and Kafatari phases) (Sumner 1989; see also McCall 2013a). Ninety-four sites have been assigned to the Kaftari period (named after Tal-i Kaftari) and divided into four hierarchical levels (Malyan, three towns, seven large villages, 82 small villages), with the identification of different zones, each

with distinctive characteristics, in the settlement distribution.

Tal-i Malyan, identified with Anshan (Reiner 1973), was the largest site in the River Kur basin (the second-largest site, Qaleh, covers 15 ha) and its Kaftari sequence is chronologically divided into Early (2200–1900 BC), Middle (1900–1800 BC) and Late Kaftari (1800–1600 BC) ‘stages’ (Sumner 1988). The site grew from c. 40 ha (at the end of the 3rd millennium BC) to a maximum size of 130 ha during the Middle Kaftari; a slight reduction in area has been postulated in the Late Kaftari, when the site is thought to have contracted to 98 ha.

The ancient site was protected by a massive city wall in the Kaftari period, and levels dating to this period were found to be present in several excavation areas and soundings, although they have not yet been published (Nickerson 1983; 1991). The most important data came from Operation ABC, in which a refuse deposit 2–3 m deep with a large amount of pottery and small finds was excavated (Sumner 1974: 164–173). Operation GHI brought to light the remains of buildings and associated deposits with many finds, including tablets and sealings. Operation FX106 unearthed five levels and a domestic structure. A transitional Banesh-Kaftari phase was identified in Sounding H5 of Operation GHI, showing that a hiatus between the two periods, previously thought to last from 2800 BC to 2200 BC, was more brief – if not indeed completely non-existent (Miller and Sumner 2004).

The region between Khuzistan and Fars has been investigated, especially in the Behbahan/Zohreh plain (Dittmann 1984; 1986), and additional data on the Old Elamite occupation in western Fars comes from reconnaissance in the Mamasani district and excavations at Tol-e Spid and Tol-e Nurabad (Potts et al. 2009; McCall 2013b), where the rock-relief of Kurangun, probably dating to the Sukkalmah period, is also located (Seidl 1986; Binder 2013; Álvarez-Mon 2014).

Lastly, the region of Bushehr on the Persian Gulf coast might have been an important area controlled by the Elamite kingdom, as indicated by finds discovered during an excavation season at Tul-e Peytul (ancient Liyan) in the early 1890s (Pézard 1914; see also Potts 2003), although a recent survey carried out by an Iranian-British team failed to identify diagnostic pottery reliably datable to the Middle Bronze Age (Carter et al. 2006).

Our knowledge of the main classes of finds from this epoch (mainly pottery, metal items, terracotta figurines and glyptics; Potts 2015: 141–144, 162–167) and their assessment with regard to affinities and chronology is restricted to the sequences from Susa (e.g. Amiet 1972; Gasche 1973; Tallon 1987; Spycket 1992), while to the objects from the Kaftari levels in Malyan, Fars (currently unpublished) new material has been recently added, and a reliable regional pottery sequence is being built up (Petrie et al. 2005; 2016). Most recent efforts have been directed on the analysis of glyptic styles, especially on the ‘Anshanite’ production, trying to distinguish different types and their chronological development (Ascalone 2010; 2011; Neumann 2013).

A sketch of political history during the Sukkalmah period

From the end of Ur III to the beginning of the Sukkalmah dynasty

Mesopotamian texts allow us to speculate on the countries, territories and political entities located in western Iran and Fars, especially during the period of the 3rd dynasty of Ur. At that time Shimashki and Shimashkian rulers are attested in Neo-Sumerian documents and inscriptions, and the original nucleus of this political entity clearly lies outside Susiana. The geographical name is written in Akkadian (*šī-maš-ki*) but is also found in Sumerian rebus writing (LÚ.SU^{ki}) (Steinkeller 1988; 1990; *contra* Vallat 1993a and Steve et al. 2002: 432–4, where the expression is interpreted as SU-people, postulating another political power in Susiana).

At Susa the presence of documents dating from Ur III year names stops at Ibbi-Sin 3, and the following loss of control of the eastern area is accompanied by the establishment of a Shimashki territorial state, although this was made up of different interrelated regional powers (De Graef 2008b; 2015). The end of the Ur III dynasty was in fact marked by the destruction of the capital itself by Elam in the 24th year of the reign of Ibbi-Sin, a traumatic event that was long remembered in the Mesopotamian world in hymns, lamentations and historical omens, but of which there is no direct evidence in Elamite inscriptions (Michalowski 1989). In literary texts, the cause of the disintegration and collapse of the kingdom of Ur are attributed – with no particular priority – on one hand, to an internal agricultural crisis, and on the other, to the invasion by Gutian and Shimashki peoples who spread from the Zagros into the eastern provinces (Lagash) but also entered cities in the centre, finally reaching even the southernmost, Eridu. Accounts of the fall of the capital speak of a long siege and final surrender, with Ibbi-Sin taken prisoner and deported. The looting of the city must have been devastating, the temples desecrated and the heart of what had been until just a few years before the most powerful kingdom of the epoch occupied by a garrison of Elamites – which lasted until Ishbi-Erra of Isin regained control of Ur. The name Ibbi-Sin became synonymous with misfortune, as witnessed by later collections of omens which contain texts such as: “harbinger of Ibbi-Sin, under whom Elam reduced Ur to a pile of rubble”.

South-western Iran during the Ur III period was included in the *ma-da*, a strip that protected the centre of the realm and contained towns directly controlled by governors or senior military officials (e.g. Susa, Sabum and Urua) and independent territories (Shimashki, Zabshali, Anshan, Huhur, Kimash and Hu’urti) with which political relations varied (Steinkeller 1987). Year names record inter-dynastic marriages, such as that between a daughter of Shulgi and a ruler of Anshan, but also military clashes to make clear Ur’s supremacy over the region. Thus Shulgi 34 records the destruction of Anshan and in the 7th year of Shu-Sin that of Shimashki/Zabshali (Potts 2015: tab. 5.2).

Different ‘lands’ of Shimashki are cited in Mesopotamian texts, and they can be located in

the eastern region of the ma-da. We know their names thanks to the historical inscriptions of Shu-Sin in particular, which describe the military campaign he conducted in year 7. Two variants of a text copied from a statue or a victory stela listed several principalities/districts of Shimashki (Zabshali, Shigrish, Yabulmat, Alumidatum, Karta, Shatilu and other smaller places), of which Zabshali was undoubtedly the most important (Kutscher 1989: 90–91; Steinkeller 2014: 291).

The Ur III documentation thus testifies to the presence of different political entities which were not unified in a centralized political structure. It is likely that Ur's military campaigns created the need for greater political cohesion between the Elamite cantons and tribal lands, through alliances and affiliations (Stolper 1982: 49–54). The control obtained by Shimashki over Susa and Khuzistan at the time of the last king of Ur as a result of this catalytic process enabled the acquisition of Mesopotamian management, political and administrative structures, which conferred a significant advantage with respect to possible competitors for the area. The occurrence of different titles among the Shimashkian rulers (lugal, ensi, G R.NÍTA), might be considered an indication that the territory maintained a certain level of regional autonomy, and although it is inappropriate to define it as a real 'federal state', it has been rightly underlined that Shimashki (and Elam in a wider chronological perspective) resembles a 'segmentary state', which is characterized by competition between its various polycentric components, with a hierarchical structure with sectors enjoying comparable powers and a coexistence of interacting peripheral powers (Potts 2015: 145–146).

Twelve Shimashkian kings (lugal) are enumerated in the 'Royal List of Awan and Shimashki', a document drafted in Sukkalmah times in Susa, in the following order: (1) Girnamme, (2) Tazitta, (3) Ebarti, (4) Tazitta (II), (5) Lu-[...]uhhan, (6) Kindattu, (7) Idattu, (8) TanRuhurater, (9) Ebarti (II), (10) Idattu (II), (11) Idattunapir and (12) Idattutemti (Scheil 1931; Gelb and Kienast 1990: 317–318; see also Roche and Overlaet 2006: 18–19).

The historical veracity of this king-list is certain, although the validity of the sequence's relative chronology has been much debated (Quintana 1998; Steve et al. 2002: 436–439; Potts 2015: tabs 5.4–5). In any case, the second part of the series (from Kindattu onwards) is of undoubted reliability, since it is confirmed by original inscriptions and Mesopotamian sources, notwithstanding the fact that unlikely alternative reconstructions have been suggested (Glassner 1996; De Graef 2006: 52–55, 68), motivated by the presence of Shimashkian rulers, listed in a different order, in the Geneology of Shilkak-Inshushinak (Idaddu > Tan-Ruhuratir > Kindattu).

The earlier part of the series, prior to Kindattu, has been interpreted as a group of contemporary rulers listed in a fictional temporal sequence (Stolper 1982: 49–54). The mention of Girnamme/Kirname, Tazitte (I or II) and Ebarti/Yabrat in texts of Shu-Sin is the proof of this overlap, but at the same it confirms the historical veracity of the list, even in Neo-Sumerian times; it is likely that Ebarti was in a prominent position and had established some

kind of political connection with the other two, who belonged to the same lineage (Steinkeller 2007: 222; but see 2014: 288–289, for the hypothesis that the Kirname in the Ur III text was not the same as the founder of the dynasty).

The most important ruler of the Ur III period was Ebarti (Yabrat), attested since Shulgi 44. He basically seems to have had good relations with Ur until the reign of Ibbi-Sin, when he probably conquered Susa for a very short period before it was retaken under Ur III's control, and he began the process of expansion of the Shimashkian state, continued by his son Kindattu (Lambert 1979: 38–44; Steinkeller 2007: 223). The latter carried out the definitive expulsion of Mesopotamians from Susiana – notwithstanding Ibbi-Sin's attempts to react with political and military countermeasures (year 5 marriage of a daughter with the governor of Zabshali; year 9 military campaign against Huhnur; year 14 military campaign against Susa, Adamtun and Awan) – and then took the war into Mesopotamia and conquered Ur. The hymn of Ishbi-Erra of Isin (2017–1985 BC) recounts that Kindattu, the man of Elam, was the vanquisher of Ur and that the sovereign of Isin will drive him from Mesopotamia (Van Dijk 1978; Potts 2015: 134–135). The king must therefore have reigned at the same time as Ishbi-Erra of Isin, as also testified by a text (year 19) referring to messengers from Kindattu and his successor Idattu (Vallat 1996a; Steinkeller 2007: 221–222).

Kindattu is also mentioned in a cylinder seal impression from Susa of his son Imazu, who is not included in the royal list (Amiet 1972: no. 1679), and therefore he might have been a junior ruler/crown prince for Shimashki at Anshan. Since we know from the literary tradition that Ibbi-Sin was taken captive to Anshan after the sack of Ur, probably together with the statue of the tutelary god Nanna which was returned to Mesopotamia only in the time of Shu-ilishu, successor of Ishbi-Erra of Isin, it has been argued that the Shimashkian core area lay in the region between Khuzistan and Fars from Kindattu onwards, and that Anshan was in a vassal dependency (Steinkeller 2007: 224–225).

A Shimashkian policy of inter-dynastic marriages that continued a long-lasting tradition deeply rooted in the ambivalent relations between Mesopotamia and the eastern countries is attested by a year name of Iddin-Dagan of Isin referring to an earlier marriage between Mātum-niattum, his daughter, and a king of Anshan, possibly Imazu, son of Kindattu (Vallat 1996b).

The sequence of sovereigns after Kindattu is confirmed by a dedicatory inscription preserved on two bronze vessels of unknown provenance, which identifies Idattu as son of Kindattu and grandson of Ebarti (II) (Steinkeller 2007: 221–222; 2011), while Tan-Ruhurater was the son of Idattu. The affiliation of the latter is indicated in a cylinder seal legend (Amiet 1972: no. 1675; De Graef 2011), and building inscriptions from Susa testify that under this king an alliance with Eshnunna (Peyronel 2013: 52–54) was celebrated by marriage with the daughter of Bilalama, Mē-Kubi (Malbran-Labat 1995: no. 5; Potts 2010: no. 11). The latter must thus have had an important role in Susa, given that the queen's activities included the building

of the temple of Inanna (together with Tan-Ruhurater) and that she is also referred to as ‘great lady’ (nin-gula) in a sealing of one of her servants found in Ville Royale Level B-VI (Amiet 1972: no. 1676).

The transition period between Ur III and Shimashki is documented at Susa by stratigraphic sounding B in the Ville Royale. Level B-VII is dated by texts which span from Shu-Sin 4 and Ib-bi-Sin 1 pertaining to the administrative archive of the scribe Igibuni (mostly lists and receipts of prestiti of barley) and originally kept in his house but then probably dismembered at the time of a rebuilding (De Graef 2005; 2008b). The level ended in a destruction which could be attributed to the conquest of the town by Shimashki as well to its retaking by Ib-bi-Sin. The following Level B-VI Early shows a continuity in the occupation without a chronological hiatus and it can be dated by the presence of the sealing of a servant of Mē-Kubi, daughter of Tan-Ruhuratir, while Level B-V (Early) should be associated with the Sukkalmah period at the time of Atta-hushu.

The final part of the Shimashki dynasty overlaps the beginning of the Sukkalmah period, since its ninth ruler (Ebarti II) was also the ‘founder’ of the new dynastic lineage. This sovereign appears between Tan-Ruhuratir and Idaddu II in the Shimashkian king list, and the latter is also attested in brick inscriptions from Susa where he is said to be a son of Tan-Ruhuratir (Malbran-Labat 1995: nos. 5–6; Potts 2010: no. 12) and on the cylinder seal of his ‘chancellor’ Kuk-Simut is titled ‘ensi of Susa’ and ‘son of Tan-Ruhuratir’ (Lambert 1971: Figure 1). On the other hand, Shilhaha (the first to be called Sukkalmah according to the inscription of Atta-hushu) is the ‘chosen son’ (*šak hanik*) of Ebarti in the Genealogy of Shilkak-Inshushinak. Ebarti is also associated with Shilhaha in an oath formula (De Meyer 1973: 293–294), he is titled ‘lugal’ in a seal legend of Kuk-Tanra, servant of Shilhaha (Amiet 1972: no. 1685) and ‘lugal of Susa and Anshan’ in an inscription of Atta-hushu (Scheil 1939: 7). While the seals of functionaries/servants that mention Ebarti are of Old Elamite style, a completely different Anshanite seal in chalcedony in the Gulbenkian collection bears a fragmentary inscription in which the name Ebarti and the title ‘lugal’ of Shimashki have been read (Lambert 1979: 43–44, Pl. 5; 1992; Steve 1989: 14–18), variously attributed to Ebarti I or II.

It is certain that Idaddu was ensi of Susa while the first Suhhalmahs were in power (Vallat 1989), since his chancellor Kuk-Simut is known from a cuneiform tablet that lists many individuals who are also named in other texts dating to the time of the ‘Pala-ishshan group’ and Atta-hushu (Vallat 1996a: 302). Moreover, a synchronism between Idattu-napir, who followed Idaddu in the Shimashki royal list, and Sumuabum of Babylon (1894–1881 BC) is attested by a cylinder seal used both on a tablet dated to the Babylonian king and on another text mentioning the Shimashkian ruler (Scheil 1908: nos. 2, 21).

The effective political power wielded by Idattu-napir and Idattu-tempti (the last rulers of Shimashki) at the time of the early Sukkalmahs is unclear, but it is possible that they controlled a region traditionally tied to the Shimashki, such as Zabshali, as may be suggested

by Idattu-napir's presence in the archive of a merchant at Susa who traded especially with Zabshali (De Graef 2009).

The rise of the Sukkalmahs thus seems to have been gradual, although it is difficult to define the various steps (De Graef 2012). It is certainly possible that it was the result of a shift to a different line within the same extended ruling family, possibly that controlling Anshan and the Fars region (Stolper 1982: 56). It is also possible that initially there was a division between Susiana ruled by the early Sukkalmahs and the nearby highlands ruled by the Shimashki (Vallat 1996a: 315–316). Certainly the confederate nature of the Elamite political structure was maintained, with the Sukkals in charge of regional bodies and the Sukkalmahs as guarantors of the system's cohesion. The continuation of Shimashki in the titles (Sukkal of Elam and Shimashki) also conserved a sign of the hegemony exercised by Shimashki since the early 2nd millennium.

It has been suggested that the final demise of Shimashki power and the definitive rise of the Sukkalmahs in Elam was caused by the reaction to the military campaigns of Gungunum of Larsa (1932–1906 BC) against Bashime (year 3), Anshan (year 5) (Sigrist 1990: 7), and his control over Susa (year 16) (Stolper 1982: 56; Carter and Stolper 1984: 27), although the aggressive policy of Larsa seems to have been directed mainly against regions already ruled by the Sukkalmah.

Generally speaking, in correspondence with this schematic historical trajectory of Elam from the rise of the Shimashki 'segmentary' state or confederation and the beginning of the Sukkalmah control over apparently the same regions, the geography of Elamite lands is dependent on the Mesopotamian 'perception' of the eastern peoples with their composite political organization and the information regarding Mesopotamian relations with them during the Ur III and early Isin-Larsa periods. At the time of the Ur III apogee – when 'Elamites' (lú NIM) frequently appear in messengers' texts from Lagash and Umma (Michalowski 2008) – a series of different lands perceived as 'belonging' to or affiliated with Shimashki appear to be variously located in a large area of western Iran along the Zagros mountains (Steinkeller 1982; 2014: 191–195). During the reign of Ib-bi-Sin, Ur progressively lost power on its eastern border, Susiana fell into the hands of Shimashki and a major cohesion of the different territories was reached at the time of Kindattu, who also possibly controlled Fars, where Anshan seems to have been subordinated to Shimashkian power (Quintana 1998). The late rulers of Shimashki titled themselves ensi of Susa (Idaddu I, Tan-ruhuratir, Idaddu II), showing the continuity of control in Khuzistan. At the time of Kindattu the boundaries of 'Elam' (or the perception of these limits by the Mesopotamians) are indicated in the hymn of Ishbi-Erra as stretching from Bashime/Pashime to the shore of the sea (the Iranian coast of the Persian Gulf) and the frontier of Zabshali, and from Arawa, the 'lock' of Elam, to the border of Marhashi (Vallat 1991). These indications might be considered merely a 'mental' map of the ruler of Mesopotamia at the beginning of the 2nd millennium, but they do show that the

northern and southern limits were constituted by the Caspian Sea and Persian Gulf, since Zabshali – understood as Shimashki – extended ‘from Anshan to the Upper Sea’ according to Shu-Sin (Kutscher 1989: 76). Arawa/Urua, defined as the ‘lock/bolt of Elam’ might be located between Susa and Mesopotamia (Steinkeller 1982: 244–246), while Marhashi is a well-known distant eastern land located in the Kerman region/Jiroft valley (Steinkeller 2012). The epithet ‘lock/bolt’ is used also for Huhmur in relation to Anshan. This region probably corresponds to the Ram Hormuz plain, since it is mentioned in a brick inscription of Amar-Sin from a site in the region, possibly Tol-e Bormi (Mofidi-Nasrabadi 2005), although the Behbahan and Mamasani regions have also been suggested (Duchene 1986; Petrie et al. 2005: 52).

The historical reconstruction of the vicissitudes of Elam between 2100 and 1500 BC is certainly only approximate, being deduced from sources that are not always explicit and in part contradictory, with debate on certain issues, but it seems undeniable that an independent Elamite power became established at the very end of the 3rd millennium BC. This was made possible by Shimashkian rulers who succeeded in forging tribal and territorial links by means of kinship ties, forming an extensive interregional union (Stolper 1982: 49). The passage to the Sukkalmah dynasty may be seen against the background of this progressive tendency towards the aggregation of territorial units through attempts to formalize interlocking hierarchies, although these might have been unstable and are certainly difficult to understand due to the scarcity of available documentation, reflected in the new titles of the Sukkalmahs and Sukkals.

The Sukkalmah period (c. 1900/1500–1600 BC)

A comprehensive evaluation of the political history, historical geography and socio-political organization of Elam during the Sukkalmah period is hampered by the paucity of information in available written sources.

Geographical information on Elam during the Sukkalmah period is almost non-existent in Mesopotamian texts and very scarce in the documents from Susa (Vallat 1993a). Data on political organization collected from royal inscriptions, administrative records and seal legends are ambiguous and cannot easily be correlated, so that the dynastic sequence has been strongly debated.

The period of the Sukkalmah dynasty is distinguished by several important new developments with respect to the preceding epoch. Above all is the structure of government and principal titles of those at the vertices of power, who are identified in inscriptions by the terms Sukkalmah (literally ‘grand regent’), Sukkal + GN (Elam, Shimashki and Susa), although at the same time a great variety of titles also existed (Vallat 1990).

The term Sukkalmah originated in Mesopotamia, where it first appears during the Early Dynastic period, and during Ur III it came to indicate a second office after ensi, at least during the long period in which it was held by Arad-Nanna, during which he also became ensi of

Girsu-Lagash and was appointed to numerous positions, including that of šagina of Pashime (Iranian coast of the Persian Gulf) (Michalowski 2013). The Sukkal-mah of Lagash had effective control of the entire ma-da, the buffer zone north and east of the centre (kalam) of the kingdom, and therefore also of Susa (Steinkeller 1987). The reasons for which the term was chosen for the paramount ruler in Elam are not altogether clear, but are certainly connected with the fact that the authority present in Susa during the Neo-Sumerian period was that of the Sukkal-mah. The title could not have been used by the Shimashki dynasties that were active at the time of the fall of the kingdom of Ur III but first appear in reference to Shilhaha, who was also the ‘chosen son’ of Ebarti II (Vallat 1990).

Administrative texts and royal inscriptions record about 30 sukkals and sukkalmahs, and although it is not possible to establish the length of their reigns, they may be placed in order and tied in by means of a few synchronisms to the absolute chronology of Mesopotamia (Tab. 1). However, the frequent occurrence of identical names shared by different people and the existence of several diverse interpretations of the sequence have led to different reconstructions.

The sequence of Sukkalmahs initially produced on the basis of lineages attested in documents from Susa (Scheil 1933: I-III; Cameron 1936: 229; Rutten 1949: 166–167) was then compared with the Middle-Elamite text, ‘The Genealogy of Shilhak-Inshishinak’, dated to the mid-13th century BC, which gives the names of previous sovereigns who had carried out restoration work on the Temple of Inshushinak (Vallat 1990: 298–299). In reality, there exist three distinct documents: a stela (König 1965: no. 48) and two pivot-stones (48a and 48b), related to different buildings dedicated to the paramount god Inshushinak. Two inscriptions are identical, while the third (48a) has some differences at the end of the Sukkalmah list (omission of Atta-hushu and inverted order for Kuk-nashur and Temti-halki).

W. Hinz (1963; 1971) was responsible for the most popular list drawn up prior to the fundamental work of F. Vallat (1994; 1996a; 2004; 2007; 2009), which has led to a substantial revision and a new version, from which there are some divergences (e.g. Steve et al. 2002: tab. 1; Quintana 2010), but which is currently accepted by most scholars (e.g. Potts 2015: tab. 6.1) (Tab. 1). The principal modification to the original list involves the movement of the Sukkalmahs of the so-called Pala-ishshan group from the final to the initial period of the dynasty, while current differences of opinion regard in particular the number of Sukkalmahs who share the same name of Kuk-nashur (four according to Quintana 1996 and three according to Steve et al. 2002: 449–452).

[Table 11.1 Most probable sequence of Elamite rulers during the Old Elamite period – Sukkalmah dynasty \(in bold the ruler attested as sukkalmah\). S = seal legend; B = brick inscription; T = cuneiform tablet\(s\); O = object inscription; G = Genealogy of Shilhak-Inshushinak \(data after Potts 2015: tab. 6.1; see also Quintana 2010 for references\).](#)

Ruler	Source	Filiation	Titles (other than sukkalmah)	Synchronism
-------	--------	-----------	----------------------------------	-------------

Sumerian, Akkadian, and Elamite				
Ebarat (II)	S, G		lugal of Anshan and Susa	
Shilhaha	S, G	chosen son of Ebarti	lugal adda-lugal of Anshan and Susa	
Pala-ishshan	T, S			
Kuk-Kirmash	B, T, S, G	sister's son of Shilhaha	sukkal of Elam, Shimashki and Susa	
Kuk-Nashur (I)	B?, T, S	son of Shilhaha		
Atta-hushu	B, S, T, G	sister's son of Shilhaha	sukkal and ippir of Susa shepherd of the people of Susa shepherd of Inshushinak he who holds the reins(?) of Susa	Gungunum of Larsa 16 (1932–1905 BC) Sumu-abum of Babylon 1 (1884 BC)
Tetep-mada	T, S	sister's son of Shilhaha		
Shiruk-tuh	T, S, G	sister's son of Shilhaha		Zambiya of Isin (?) (1834–1832) Shamshi-Addu of Assyria (1813–1781 BC)
Siwe-palar-huppak	S, T, G	sister's son of Shiruk-tuh	sukkal of Susa prince of Elam	Hammurapi of Babylon (1792–1750 BC)
Kudu-zulush I	T, S	sister's son of Shiruk-tuh	sukkal of Susa	Hammurapi of Babylon (1792–1750 BC)
Kutir-Nahhunte (I)	T	son of Shiruk-tuh		
Temti-Agun	B, T, S	sister's son of Shiruk-tuh	sukkal of Susa	
Kutir-Shilhaha	T		sukkal	
Kuk-Nashur (II)	B?, G, S	sister's son of Temti-Agun sister's son of Shilhaha	sukkal of Susa sukkal of Elam	Ammi-Saduqa of Babylon 1 (1645 BC)

Kudu-zulush (II)	T		lugal of Susa
Kuk-Nashur (III)	B?, S	sister's son of Shilhaha	sukkal of Elam sukkal of Elam, Shimashki and Susa
Tan-Uli	S, T, G	sister's son of Shilhaha	sukkal
Temti-halki	B, G	sister's son of Shilhaha	sukkal of Elam, Shimashki and Susa
Kuk-Nashur (IV)	S, G	sister's son of Tan-Uli	

The structure of the Elamite realm during the Sukkalmah period is, in any case, still quite unclear. The hypothesis proposed by G.G. Cameron (1936: 69–88, 229), that power was exercised by a sort of triumvirate headed by the Sukkalmah, who resided at Susa, and two sukkals, the Sukkal of Elam and Shimashki, who was normally the brother of the Sukkalmah, and the Sukkal of Susa, who was the son of the Sukkalmah, is based on the evidence of multiple titles and relative associations, but the considerable uncertainties have led to estimates of the number of triumvirates varying from 14 (Cameron 1936) to a maximum of 24 (Börker-Klähn 1970: 180–215).

The first 'triumvirate' is supposed to have been that of Ebarat/Shilhaha/Atta-hushu (Scheil 1939: 7–8 no. 4), but it is certain that between Hatta-hushu and Shilhaha there existed other Sukkalmahs (Steve et al. 2002: 444; Vallat 1996a: 299; *contra* Glassner 2013). The existence of a mechanism that would have determined the passage of power from the Sukkalmah to his brother (sukkal of Elam), whose post would, in turn, have been taken by another brother or the Sukkalmah's son, following a line of descent between brothers that passed only to the son – and thus to the next generation – of the first brother (De Meyer 1982) is not always demonstrable. It should be noted that our understanding of this system is based solely on records from Susa, so it is unknown whether similar systems existed in other parts of Elam, given its undoubtedly confederate nature and centre in Anshan, about which nothing is known.

Another vigorously debated aspect of Sukkalmah succession concerns the interpretation of the epithet *mār aḫāti* (Akkadian)/*ruhu-šak* (Elamite) + NP, which is often used to express the degree of kinship between Elamite rulers. It literally means 'sister's son' and has been interpreted as evidence of the predominance of a line of succession through the sister of the ruling Sukkal or Sukkalmah (avunculate) (Van Soldt 1990; Glassner 1994) or of the custom of sibling marriage with one's sister and/or the widow of a deceased brother (levirate) (e.g. König 1926; Hinz 1964: 76; Vallat 1994; 1996a: 299–300; Steve et al. 2002: 444–445, 546–553). However, the epithet is also associated with the name of the Sukkalmah Shilhaha as a kind of

royal title adopted by many Elamite rulers (also by Humban-immena and Huteludush-Inshushinak during the Middle Elamite period), clearly excluding any biological ties. In those cases it seems that it refers to legitimation through kinship with the founder-ancestor Shilhaha and thus would mean 'legitimate descendant' (Steve et al. 2002: 444).

These are, therefore, two distinct uses of this epithet, one probably connected with the development of family ties that could determine succession also (but not only) through lineages different from those traditional in the Mesopotamian world (between father and son line), and another related to a royal ancestor or dynasty founder, Shilhaha, who was also the first to be linked with the title.

The system of distribution and transmission of power was probably based on typical Elamite socio-juridical traditions, since some aspects of these are found in legal documents from Susa regarding the management of family assets, although a progressive tendency to adopt Mesopotamian practices is seen in these (hereditary division, transmission from parent to child, sales and loans as guarantees for land) (Cuq 1931; Klíma 1963; De Meyer 1961; De Graef 2010). Also, in general political terms the system had to answer the need to use diverse forms of kinship bonds so as to maintain the effective cohesion of an extensive and diversified territory. The two primary centres of Sukkalmah Elam were Susa in Khuzistan and Anshan (Tal-i Malyan) in Fars – and these two cities were almost 400 km apart, whereas Liyan on the Persian Gulf (Pashime) was the principal centre for maritime commercial trading. The land between Susa and Anshan was occupied by small and middle-sized settlements, and a few larger ones (such as Tol-e Bormi, which might be Huhnur), whereas we do not know for certain how far it continued northwards, into Luristan and beyond, and know little of the dynamics of political control towards the east, where Marhashi no longer seems to have been a sizeable regional entity in the early 2nd millennium BC. The most precise historical information at our disposal concerns relations with Mesopotamia, and in particular regards the Elamite influence exercised in the zones of Hamrin and Diyala and the expansionism of the Sukkalmahs at the time of the Mari archives.

The early Sukkalmah period (c. 1980/1950–1800 BC)

As we have seen, the beginning of the Sukkalmah dynasty did not correspond to an abrupt change in the history of Elam, since its first sovereign, Ebarti, appears to have been the same who is also present as the ninth ruler in the list of Shimaski kings, although there are diverse interpretations of the passage from one dynasty to the other, which occurred in about the mid-20th century BC (Vallat 2004; De Graef 2012). Although Ebarti is referred to as 'king of Susa and Anshan' in late Middle Elamite sources, Shilhaha is the first to be called Sukkalmah (by Atta-hushu; Vallat 1990: 121) and certainly in Elamite tradition is considered the true 'founder' of the dynasty, given that the epithet 'sister's son of Shilhaha' which is used for many later

sovereigns undoubtedly refers to his special role in the dynasty's early period. However, Shilhaha proclaims himself 'the chosen son of Ebarat' and must have ruled at Susa simultaneously with Idaddu II of Shimashki, as testified to by the seals of numerous high officials, which refer to both the kings of Shimashki and the Sukkalmahs (e.g. Kuk-simut, Turunkunz, Atta-puni: Amiet 1972: n 1677; 1973: nos. 41 and 43; Vallat 1996a: 302–305).

Kuk-Kirmash, who belonged to the so-called 'Pala-ishshan group' of Sukkalmahs that Vallat has shown must be placed in the dynastic series immediately after Shilhaha and before Atta-hushu (Vallat 1996a: 301; *contra* Grillot and Glassner 1991; 1993), was in fact the first to call himself Sukkalmah.

It is in this period that the military action of Gungunum of Larsa (1932–1905 BC) against Elam took place. It is probable that after his victory over Pashime and Anshan (year 3 and year 5) the king of Larsa succeeded in occupying Susa and it was probably he who placed Atta-hushu on the throne (Vallat 1996a: 309–312; Steve et al. 2002: 446–447). This ruler in fact has a unique series of titles ('shepherd of Inshushinak' 'shepherd of the people of Susa', 'sukkal and teppir' and 'he who holds the reins? of Susa'). He never used the title of Sukkalmah (although he ruled over three generations of scribes belonging to the same family), and he is never associated in administrative documents with another sukka or sukkalmah. Moreover, he was the only ruler whose texts were dated according to the Mesopotamian year system. It therefore seems probable that he was a usurper who came to power with the help of Gungunum and ruled only over Susa. If this is the case, Khuzistan was in some way controlled by Larsa during the reign of Atta-hushu, which was quite long since the written texts from Susa give two synchronisms (year 16 of Gungunum = 1916; year 1 of Sumuabum of Babylon = 1884 BC). From this year there are no correlatable textual references until the years in which Sin-iqisham (1840–1836 BC) reigned over Larsa, with Susa perhaps still controlled by a probable successor to Atta-hushu, Tetep-mada and maybe other rulers not yet attested in written sources.

The late Sukkalmah period (c. 1800–1600/1550 BC)

A new phase in Elamite politics began at the end of the 19th century BC, under the Sukkalmah Siruk-tuh (Vallat 1996a: 313–314), who took firm control of Susa and may have been the Elamite ally of Zambiya of Isin (1836–1834 BC), defeated by Sin-iqisham of Larsa (Sigrist 1990: 29). The king pursued a policy of consolidation of the lands north of Susiana, together with expansion towards the eastern Mesopotamian region. This policy may have been favoured by the conquest of Larsa by Kudur-mabuk, starting a new Amorite ruling dynasty through his sons Warad-Sin and Rim-Sin. Kudur-mabuk was son of Shemti-Shilkah (Henkelman 2010) and both bore Elamite names and came from Yamutbal in the Trans-Tigridian region, a tribal entity that was not hostile to Elam and may even have been a

dependency of it.

Since he could count on the non-belligerence of Larsa, Shiruk-tuh formed an alliance with Shamshi-Addu I of Assyria and Eshnunna to the north against the people of the central and northern Zagros. The king is mentioned in a letter from the archive of Shemshara (dated to 1785 BC) as Shuruhtuh 'king of Elam' and it is explicitly said that he was able to raise an army of 12,000 to conquer the lands of the Gutis ruled by Indassu (Eidem and Læssøe 2001: 32–33). It is possible that a fragmentary victory stela of unknown Iranian provenance refers to this particular Elamite military campaign in the Zagros conducted by Shiruk-tuh, since the inscription, written in Elamite, lists several geographical names followed by the phrase 'I took' and gives the name of Indassu (the Gutian ruler) (Farber 1975).

The apogee of Elam was certainly reached during the reign of Siwe-palar-hupak, curiously mentioned in only a few texts from Susa, but whom we know to have had an important role on the Mesopotamian chessboard. The Mari archives of the time of Zimri-Lim (1780–1758 BC) furnish for this Sikkalmah a most interesting collection of information regarding both his direct relations with Mari itself and the part he played in the more general historical events of the period (Lafont 2001). In fact the Mari texts mention two rulers, Sheplarpak (= Siwe-palar-hupak) (referred to as sikkal of Elam or king of Anshan) and Kutu-Zulush (probably his brother, referred to as sikkal of Susa), as well as an unnamed 'Sikkalmah' that might have been Siwe-palar-hupak himself (Vallat 1996a: 314–315), although the unlikely suggestion of Shiruk-tuh (father of Siwe-palar-hupak) has also been proposed (Grillot and Glassner 1991: 89, 94).

Direct trade with Susa involving above all the procurement of tin is well documented for years 7–9 of Zimri-Lim's reign, with visits by merchants, diplomatic messengers and the exchange of precious gifts between the royal courts (Joannès 1991; Michel 1996: 390–391). This trade network clearly substituted the traditional route through the Diyala-Hamrin managed by the kingdom of Eshnunna ruled by the powerful king Ibal-pi-El, and might thus have caused a deterioration of the pre-existing balance in political relations, resulting in a confrontation between Eshnunna and Mari-Elam.

It has been rightly pointed out that in this period the prestige of the Elamite sovereign was apparently greater than that of the Amorite kings: the Sikkalmah seems to have had the role of arbitrator in Mesopotamia (between Mari and Babylon and between Larsa and Eshnunna) and was called 'father' by the Mesopotamian kings who referred to one another as 'brothers' (Durand 1994; 2013). The motive for this presumed 'superiority' may have been the tradition connected with the destruction of Ur, which grew markedly during the Old Babylonian period, together with the perception of Elam as a kingdom covering a huge area, without rivals in Mesopotamia, and only vaguely defined, in which rich resources of precious materials and metals were present.

The expansionist policies of Elam in Mesopotamia continued with the conquest of

Eshnunna, thanks to the alliance with Mari and Babylon, which have been correlated with the destruction attested at administrative centers (Tell Harmal) and strongholds in the Hamrin (Peyronel 2013: 62). Strengthened by his control of Diyala, the Elamite sovereign carried out successful military raids in Northern Mesopotamia, occupying Ekalltum, Razama and Shubat-Enlil (Charpin 1986), until he was stopped at Hiritum by the joint armies of Mari and Babylon. This anti-Elamite alliance, considered the result of 'Amorite nationalism' in response to Elam's attempt to impose its sovereignty in Mesopotamia (Charpin and Durand 1991), is recorded in a text that reports the oath sworn at the peace treaty (Durand 1986; Charpin 1990). Hammurabi defeated Elam in his 13th year, but Kutu-Zulush's successor, Kutir-Nahhunte I, who was already an associate to the throne of Shiwe-palar-huppak, was still able to retaliate, attacking Samsu-iluna of Babylon in the mid-18th century BC, and Abi-eshuh had once more to do battle with Elam (Van Koppen 2013: 377–379).

Apart from an isolated synchronism between Ammi-Saduqa of Babylon (1646–1626 BC) and Kuk-Nashur (II), the history of the last Sukkalmahs is virtually unknown, and only the texts from Susa document the dynastic sequence (Steve et al. 2002: 448–451; De Graef 2007).

In any case, due to the large number of homonyms between officials and the number of princes who could come to power simultaneously, understanding the sequence of rulers is a complex matter. The main reference point is furnished by documents that may be attributed to the family of Anih-Shushim, in which the members of five generations are associated with nine sukkalmahs, from Kutir-nahhunte until the last sukkalmah, Kuk-Nashur III (or IV, according to Quintana 1996).

Also significant – but of a process found also in Mesopotamia during the Late Old Babylonian period – is the occurrence of royal interventions that re-established justice in the country, strong indicators of an economic crisis and the progressive indebtedness of many extended families. One has the impression that a marked reduction in size and wealth takes place, accompanied perhaps by a political crisis with internal conflict for the detention of power.

Like the beginning of the dynasty, its end, too, seems to have been marked by a transitional period, and the rise of the Kidinuids, characterized by the new title of 'king of Susa and Anshan', was not an abrupt change (Steve et al. 2002: 452–459; Mofidi-Nasrabadi 2010). Ongoing excavations at Haft Tepe will certainly yield an improved understanding of the passage from the Old Elamite to Middle Elamite period as well as the nature of relations with the new 'capital' of Kabnak and with Susa, the preceding great centre of Sukkalmah power in Khuzistan.

Abbreviations

BSOAS	Bulletin of the School of Oriental and African Studies
JA	Journal Asiatique
JAOS	Journal of the American Oriental Society
JCS	Journal of Cuneiform Studies
MARI	Mari, Annales de Recherches Interdisciplinaires
MDAI	Mémoires de la Délégation Archéologique en Iran
MDP	Mémoires de la Délégation en Perse
NABU	Nouvelles Assyriologiques Brèves et Utilitaires
RA	Revue d'Assyriologie et d'Archéologie Orientale
RGTC	Répertoire Géographique des Textes Cunéiformes
ZA	Zeitschrift für Assyriologie und verwandte Gebiete

References

- Abdi, K. and Beckman, G. 2007. An Early Second-Millennium Cuneiform Archive from Choga Gavaneh, Western Iran. *JCS* 59: 39–91.
- Álvarez-Mon, J. 2013. Khuzestan in the Bronze Age. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press, 217–232.
- . 2014. Aesthetics of the Natural Environment in the Arts of the Ancient Near East: The Elamite Rock-Cut Sanctuary of Kurangun. In: Brown, B.A. and Feldman, M.H. (eds.) *Critical Approaches to Ancient Near Eastern Art*. Boston: de Gruyter, 741–771.
- Amiet, P. 1972. *Glyptique Susienne. Des origines à l'époque des Perses Achéménides. Cachets, sceaux-cylindres et empreintes antiques découvertes à Suse, de 1913 à 1967*, MDAI 43. Paris: Paul Geuthner.
- . 1980. La glyptique du second millénaire en provenance des chantiers A et B de la ville royale de Susa. *Iranica Antiqua* 15: 133–147.
- Ascalone, E. 2010. Sigilli Paleoelamiti dei primi secoli del II millennio a.C. I codici figurativi della glittica Paleoelamita e le nuove formule di espressione dinastica dei sovrani Simashki. In: Matthiae, P., Pinnock, F., Marchetti, N. and Nigro, L. (eds.) *Proceedings of the 6th International Congress on the Archaeology of the Ancient Near East, May, 5th-10th 2008, "Sapienza" – Università di Roma. Volume 1*. Wiesbaden: Harrassowitz Verlag, 629–639.
- . 2011. *Glittica Elamita. Dalla metà del III alla metà del II Millennio a.C. Sigilli a stampo, sigilli a cilindro e impronte rinvenute in Iran e provenienti da collezioni private e museali*. Roma: L'Erma di Bretschneider.
- Bayani, M.I. 1979. The Elamite Periods on the Izeh Plain. In: Wright, H.T. (ed.) *Archaeological Investigations in Northeastern Xuzestan, 1976*. Ann Arbor: University of Michigan, 99–105.
- Binder, A.-B. 2013. Von Susa nach Anšan – Zu Datierung und Ursprung des Felsreliefs von Kūrāngūn. *Elamica* 3: 35–88.
- Birot, M. 1985. Les chroniques 'Assyriennes' de Mari. *MARI* 4: 219–242.
- Bloch, Y. 2014. The Conquest Eponyms of Samsi-Adad I and the Kanis Eponym List. *NEA* 73: 191–210.
- Bruins, E.M. and Rutten, M. 1961. *Textes mathématiques de Suse*. MDP 34. Paris: Paul Geuthner.

- Börker-Klähn, J. 1970. *Untersuchungen zur altelamischen Archäologie*. PhD Diss., Berlin: Freie Universität.
- Cameron, G.G. 1936. *History of Early Iran*, Chicago-London: University of Chicago.
- Carter, E. 1971. *Elam in the Second Millennium B.C.: The Archaeological Evidence*. PhD Diss., University of Chicago.
- Carter, E. and Stolper, M.W. 1984. *Elam: Surveys of Political History and Archaeology*. Berkeley: University of California Publications.
- Carter, R.A., Challis, K., Priestman, S.M.N. and Tofghian, H. 2006. The Bushehr Hinterland. Results of the First Season of the Iranian-British Archaeological Survey of Bushehr Province, November-December 2004. *Iran* 44: 63–103.
- Charpin, D. 1986. Les Elamites à Šubat-Enlil. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta historiae Aelamicae. Mélanges offerts à M.J. Stève*. Paris: ERC, 129–137.
- . 1990. Une alliance contre l’Elam et le rituel du *lipit napištim*. In: F. Vallat (ed.) *Contribution à l’histoire de l’Iran. Mélanges offerts à Jean Perrot*, Paris: ERC, 109–118.
- . 2004. Histoire politique du Proche-Orient Amorrite (2002–1595), in Charpin, D., Edzard, D.O. and Stol, M. (eds.) *Mesopotamien. Die altbabylonische Zeit*, OBO 160/4, Fribourg-Göttingen: Academic Press Fribourg, 25–480.
- . 2013. “Ansi parle l’empereur”. à propos de la correspondance des *Sukkal-Mah*. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. Leiden-Boston: Brill, 341–353.
- Charpin, D. and Durand, J.-M. 1991. La suzeraineté de l’empereur (Sukkalmah) d’Elam sur la Mésopotamie et le ‘nationalisme’ amorrite. In: De Meyer, L. and Gasche, H. (eds.) *Mésopotamie et Elam. Actes de la XXXVIème Rencontre Assyriologique Internationale, Gand, 10–14 juillet 1989*. Ghent: University of Ghent, 59–65.
- Charpin, D. and Ziegler, N. 2003. *Mari et le Proche-Orient à l’époque amorrite: essai d’histoire politique*, Florilegium Marianum 5, Paris: ERC.
- Cole, S.W. and De Meyer, L. 1999. Tepti-aḫar, King of Susa, and Kadašman-^dKUR.GAL. *Akkadica* 112: 44–45.
- Cuq, E. 1931. Les actes juridiques susiens. *RA* 28: 47–71.
- Dalley, S. 2009. *Babylonian Tablets from the First Sealand Dynasty in the Schøyen Collection*. Bethesda: CDL Press.
- De Graef, K. 1999. Les étrangers dans les textes paléobabyloniens tardifs de Sippar (Abi-ešuh – Samsuditana) 1ère partie. Sur les inconnus “connus” Cassites, Elamites, Sutéens, Suḫéens, Gutiéens et Subarénnes. *Akkadica* 111: 1–48.
- . 2005. *Les archives d’Igibuni. Les documents Ur III du chantier B à Suse*, MDP 54. Gand, Université de Gand.
- . 2006. *De la dynastie de Simaški au Sukkalmahat. Les documents fin PE II – début PE III du chantier B à Suse*, MDP 55. Gand: Université de Gand.
- . 2007. Les textes de V récent du Chantier B à Suse (fin sukkalmahat – ca. 1575–1530 av. notre ère). *Iranica Antiqua* 42: 41–59.
- . 2008a. Rest in Pieces: The Archive of Igibuni. In: Garfinkle, S.J. and Johnson, J.C. (eds.) *The Growth of an Early State in Mesopotamia: Studies in Ur III Administration*. Madrid: Consejo Superior de Investigaciones Científicas, 225–234.
- . 2008b. Annus Simaškensis. L’usage des noms d’année pendant la période simaškéenne (ca. 1930–1880 av. notre ère) à Suse. *Iranica Antiqua* 43: 67–87.
- . 2009. Count Your Sheep! Doings and Dealings of Kûyâ, Trader in Small Stock During the Early Sukkalma? *RA* 103: 5–18.

- . 2010. *Inšušinak lu dārū!* Lawsuits in Old Babylonian Susa, *Zeitschrift für altorientalische und biblische Rechtsgeschichte* 16: 27–48.
- . 2011. Tan-Ruhurate/ir. In: *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* Bd. XIII. Berlin: de Gruyter, 443–444.
- . 2012. Dual Power in Susa. Chronicle of a Transitional Period from Ur III via šimaški to the Suhhalmahs. *BSOAS* 75: 525–546.
- . 2013. The Use of the Akkadian in Iran. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press, 263–282.
- . 2015. Susa in the Late 3rd Millennium: From a Mesopotamian Colony to an Independent State (MC 2110–1980). In: Sallaberger, W. and Schrakamp, I. (eds.) *Associated Regional Chronologies of the Near East and Mediterranean*. Vol. III. *History & Philology*. Turnhout: Brepols, 289–296.
- De Meyer, L. 1961. Une Famille susienne du temps des sukkalmahhu. *Iranica Antiqua* 1: 8–19.
- . 1973. Epart sukkalmah? In: Beek M.A. (ed.) *Symbolae Biblicae et Mesopotamicae Francisco Mario Theodoro de Liagre Böhl dedicatae*. Leiden: Brill, 293–294.
- . 1982. Les structures politiques en Susiane à l'époque des sukkalmah. In: Finet, A. (ed.) *Les pouvoirs locaux en Mésopotamie et dans les régions adjacentes*. Brussels: Institut des Hautes études de Belgique, 92–97.
- Dittmann, R. 1984. *Eine Randebene des Zagros in der Frühzeit: Ergebnisse des Bahbehan-Zuhreh Surveys*, BBVO 3. Berlin: Reimer Verlag.
- . 1986. *Betrachtungen zur Frühzeit des Südwest-Iran: regionale Entwicklungen vom 6. Bis zum frühen 3. Vorchristlichen Jahrtausend*, BBVO 4. Berlin: Reimer Verlag.
- Dossin, G. 1927. *Autres Textes Sumériens et Accadiens*, MDP 28. Paris: Paul Geuthner.
- Durand, J.-M. 1986. Fragments rejoints pour une histoire élamite. In: L. de Meyer, H. Gasche and F. Vallat (eds.) *Fragmenta historiae Aelamicae. Mélanges offerts à M.J. Stève*. Paris: ERC, 111–128.
- . 1994. L'empereur d'Elam et ses vassaux. In: Gasche, H., Tanret, M., Janssen, C. and Degraeve, A. (eds.) *Cinquante-deux réflexions sur le Proche-Orient ancien, offertes en hommage à Léon de Meyer*. Leuven: Peeters, 15–22.
- . 2013. La "suprématie élamite" sur les Amorrites. Réexamen, vingt ans après la XXXVI^eRAI (1989), in De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. Leiden-Boston: Brill, 329–333.
- Duchene, J. 1986. La localisation de Huhnur, in De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta historiae Aelamicae. Mélanges offerts à M.J. Stève*. Paris: ERC, 65–74.
- Eidem, J. and Læssøe, J. 2001. *The Shemshara Archives 1- The Letters*, Copenhagen: Royale Danish Academy of Sciences and Letters.
- Farber, W. 1975. Eine elamitische Inschrift aus der I. Hälfte des 2. Jahrtausends. *ZA* 64: 74–86.
- Farokhnia, S. and De Graef, K. 2016. Tepe Hissar: Pass Through Simple to Complex, in K. Maekawa (ed.) *Ancient Iran. New Perspectives from Archaeology and Cuneiform Studies. Proceedings of the International Colloquium Held at the Center for Eurasian Cultural Studies, Kyoto University, December 6–7, 2014*. Kyoto: Nakanishi, 1–16.
- Gasche, H. 1973. *La poterie Elamite du deuxième millénaire av. J.C.*, MDAI 47. Paris: Paul Geuthner.

- Gasche, H., Armstrong, J.A., Cole, S.W. and Gruzadyan, V.G. 1998. *Dating the Fall of Babylon. A Reappraisal of Second-Millennium Chronology*, Mesopotamian History and Environment 4. Ghent: University of Ghent.
- Gelb, I.J. and Kienast, B. 1990. *Die altakkadischen Königsinschriften des dritten Jahrtausends v. Chr.* Stuttgart: F. Steiner.
- Ghirshman, R. 1965a. Suse du temps des Sukkalmah, Campagne de fouilles 1963–1964. Rapport préliminaire. *Arts Asiatiques* 11: 3–21.
- . 1965b. L'architecture élamite et ses traditions. *Iranica Antiqua* 5: 93–102.
- . 1967. Suse. Campagne de l'hiver 1965–1966. Rapport préliminaire. *Arts Asiatiques* 15: 3–27.
- . 1968. Suse au tournant du III^e au II^e millénaire avant notre ère. *Arts Asiatiques* 17: 3–44.
- Glassner, J.-J. 1994. Ruḥuṣak – mār aḥatim: la transmission du pouvoir en élam. *JA* 282: 219–236.
- . 1996. Les dynasties d'Awan et de šimaški. *NABU* 1996, no. 34.
- . 2013. Les premiers Sukkalmah et le derniers rois de Simaški. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. Leiden-Boston: Brill, 319–328.
- Grillot, R. and Glassner, J.-J. 1991. Problèmes de succession et cumulus de pouvoirs: une querelle de famille chez les premiers sukkalmah? *Iranica Antiqua* 26: 85–99.
- . 1993. Chronologie susienne. *NABU* 1993, no. 18.
- Haerincx, E. and Overlaet, B. 2008. *Luristan Excavation Documents Vol. VII: The Kalleh Nisar Bronze Age Graveyard in Pusht-i Kuh, Luristan*. Leuven: Peeters.
- Henkelman, W.F.M. 2010. šemti-šilhak. In: *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* Bd. XII. Berlin: de Gruyter, 388–389.
- Henrickson, E.F. 1984. šimaški and Central Western Iran: The Archaeological Evidence. *ZA* 74: 98–122.
- Hinz, W. 1963. Elamica. *Orientalia* 32: 1–20.
- . 1964. *Das Reich Elam*. Stuttgart: Kohlhammer.
- . 1971. Grossregent. In: *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* Bd. III/9. Berlin: de Gruyter, 654–655.
- Joannès, F. 1991. L'étain, de l'Elam à Mari. In: De Meyer, L. and Gasche, H. (eds.) *Mésopotamie et Elam. Actes de la XXXVI^{ème} Rencontre Assyriologique Internationale, Gand, 10–14 juillet 1989*. Ghent: University of Ghent, 66–76.
- Kantor, H.J. 1977. The Elamite Cup from Choga Mish. *Iran* 15: 11–14.
- Klíma, J. 1963. Le droit élamite au II^e millénaire av. n. è. et sa position envers de droit babylonien. *ArOr* 31: 287–309.
- König, F.W. 1926. Mutterrecht und Thronfolge im alten Elam, in *Festschrift der National Bibliothek in Wien*. Wien, 529–552.
- . 1965. *Die elamischen Königsinschriften*, AfO Beih. 16. Graz: Biblio Verlag.
- Kutscher, R. 1989. *The Brockmon Tablets at the University of Haifa: The Royal Inscriptions*. Haifa: Haifa University Press.
- Lafont, B. 2001. Relations internationales, alliances et diplomatie au temps des royaumes amorrites. *Amurru* 2: 213–328.
- Lambert, M. 1971. Investitures de fonctionnaires en Elam. *Journal Asiatique* 267: 217–221.
- Lambert, W.-G. 1979. Near Eastern Seals in the Gulbenkian Museum of Oriental Art, University of Durham. *Iraq* 41: 1–46.
- . 1991. The Akkadianization of Susiana under the Sukkalmahs. In: De Meyer, L. and Gasche, H. (eds.) *Mésopotamie et Elam. Actes de la XXXVI^{ème} Rencontre Assyriologique Internationale, Gand, 10–14 juillet 1989*. Ghent: University of

- Ghent, 153–161.
- . 1992. Further Notes on a Seal of Ebarat. *RA* 86: 85–86.
- Mahboubian, H. 2004. *Elam. Art and Civilization in Ancient Iran. 3000–2000 BC*. Salisbury.
- Malayeri, M. 2013. Scribal Training in Old Babylonian Susa. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. Leiden-Boston: Brill, 365–375.
- Malbran-Labat, F. 1995. *Les inscriptions royales de Suse. Briques de l'époque paléo-élamite à l'empire néo-élamite*. Paris: éditions de la Réunion des musées nationaux.
- Manning, S., Griggs, C.B., Lorentzen, B., Barjamovic, G., Ramsey, C.B., Kromer, B. and Wild, E.M. 2016. Integrated Tree-Ring-Radiocarbon High-Resolution Tomeframe to Resolve Earlier Second Millennium BCE Mesopotamian Chronology. *PLOS-ONE* 11: 1–27.
- McCall, B. 2013a. Bronze Age Fars. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press, 283–303.
- . 2013b. Re-Assessing Elamite Highland Boundaries: New Evidence for the Middle and Neo-Elamite Periods in the Mamasani Valleys, South-Western Iran. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. Leiden-Boston: Brill, 191–205.
- Mecquenem, R. de 1943a. Fouilles de Suse (1933–1939). *Mémoires de la Mission Archéologique en Iran* 29: 3–161.
- . 1943b. Note sur les modalités funéraires susiennes et leur chronologie. *Vivre et Penser: Recherches d'Exégèse et d'Histoire* 3: 133–142.
- Michalowski, P. 1989. *The Lamentation over the Destruction of Sumer and Ur*. Winona Lake: Eisenbrauns.
- . 2008. Observations on “Elamites” and “Elam” in Ur III Times. In: Michalowski, P. (ed.) *On the Third Dynasty of Ur. Studies in Honor of Marcel Sigrist*, JCS Suppl. 1. Boston: American Schools of Oriental Research, 109–124.
- . 2013. Networks of Authority and Power in Ur III Times. In: Garfinkle, S. and Molina, M. (eds.) *From the 21st Century B.C. to the 21st Century A.D. Proceedings of the International Conference on Sumerian Studies Held in Madrid 22–24 July 2010*. Winona Lake: Eisenbrauns, 169–205.
- Michel, C. 1996. Le commerce dans les textes de Mari. In: Durand, J.-M. (ed.) *Mari, Ebla et les Hurrites*, Amurru 1. Paris: ERC, 385–426.
- Miller, N.F. and Sumner, W.M. 2004. The Banesh-Kaftari Interface. The View from Operation H5, Malyan. *Iran* 42: 77–89.
- Moghaddam, A. and Miri, N. 2003. Archaeological Research in the Mianab Plain of Lowland Susiana, South-Western Iran. *Iran* 41: 99–137.
- . 2007. Archaeological Surveys in the “Eastern Corridor”, South-Western Iran. *Iran* 45: 23–55.
- Mofidi Nasrabadi, B. 2005. Ein Steininschrift des Amar-Suena aus Tappeh Bormi (Iran). *ZA* 95: 161–171.
- . 2010. Herrschaftstitular des Könige von Susa und Ansan. *Akkadica* 131: 109–119.
- . 2014. Vorbericht der archäologischen Ausgrabungen der Kampagnen 2012–2013 in Haft Tappeh (Iran). *Elamica* 4: 67–168.
- . 2015. Ergebnisse der C14-Datierung der Proben aus Haft Tappeh. *Elamica* 5: 7–36.

- . 2016. Chronological Order of the Elamite Pottery from Haft Tappeh. *Elamica* 6: 97–118.
- Neumann, G. 2013. Elams Kulturkontakte mit seinen Nachbarn im Spiegel der Glyptik des 2. Jahrtausends v. Chr. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. Leiden-Boston: Brill, 82–128.
- Nickerson, J.L. 1983. *Intrasite Variability During the Kaftari Period at Tal-e Malyan (Anshan), Iran*. Ph.D Diss., Ohio State University, Columbus.
- . 1991. Investigating Intrasite Variability at Tal-e Malyan (Anshan), Iran. *Iranica Antiqua* 26: 1–38.
- Petrie, C.A., Chaverdi, A.A. and Seyedin, M. 2005. From Anshan to Dilmun and Magan: The Spatial and Temporal Distribution of Kaftari and Kaftari-Related Ceramic Vessels. *Iran* 43: 49–86.
- Petrie, C.A., Seyedin, M. and Chaverdi, A.A. 2016. Kaftari and Kaftari-Related Ceramics in Southwest Iran and the Persian Gulf. *International Journal of the Society of Iranian Archaeologists* 2: 4–12.
- Peyronel, L. 2013. Elam and Eshnunna: Historical and Archaeological Interrelations during the Old Babylonian Period. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. Leiden-Boston: Brill, 51–70.
- Pézard, M. 1914. *Mission à Bender-Bouchir. Documents archéologiques et épigraphiques*, MDP 15. Paris: Paul Geuthner.
- Potts, D.T. 1999. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*. Cambridge: Cambridge University Press.
- . 2003. Anshan, Liyan, and Magan Circa 2000 BCE. In: Miller, N.F. and Abdi, K. (eds.) *Yeki bud, yeki nabud. Essays on the Archaeology of Iran in Honor of William M. Sumner*. Los Angeles: Cotsen Institute of Archaeology, 156–159.
- . 2010. Elamite Temple-Building. In: Boda, M.J. and Novotny, J. (eds.) *From the Foundations to the Crenellations. Essays on the Temple Building in the Ancient Near East and Hebrew Bible*, AOAT 366. Münster: Ugarit-Verlag, 49–70.
- . 2013. Luristan and Central Zagros in the Bronze Age. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press, 203–216.
- . 2015. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*. 2nd ed. Cambridge: Cambridge University Press.
- Potts, D.T. and Roustaei, K. (eds.) 2009. *The Mamasami Archaeological Project Stage One: A Report of the First Two Seasons of the ICAR-University of Sydney Joint Expedition to the Mamasami District, Fars Province, Iran*. Oxford: Archaeopress.
- Quintana, E. 1996. Le sukkalmah Kuknasur. *NABU* 1996, no. 86.
- . 1998. De nuevo sobre la dinastía elamita de Simaski. *NABU* 1998, no. 4.
- . 2010. Los reyes de Elam, *Mundo Elamita* 2010/1 (www.um.es/cepoat/elamita/).
- Reiner, E. 1973. The Location of Anšan, *RA* 67: 57–62.
- Roche, C. and Overlaet, B. 2006. Briques élamites du II^e millénaire av. J.-C. conservées aux Musées Royaux d'Art et d'Histoire de Bruxelles. *Bulletin des Musées Royaux d'Art et d'Histoire* 77: 17–72.
- Rowton, M.B. 1967. Watercourses and Water Rights in the Official Correspondence from Larsa and Isin. *JCS* 21: 267–274.
- Rutten, M. 1949. Archéologie susienne. *MDP* 31: 151–167.
- Schacht, R.M. 1975. A Preliminary Report on the Excavations at Tepe Sharafabad, 1971. *Journal of Field Archaeology* 2: 307–329.

- Scheil, V. 1908. *Textes élamites-sémitiques, quatrième série*, MDP 10. Paris: Paul Geuthner.
- . 1930. *Actes juridiques susiens*, MDP 22. Paris: Paul Geuthner.
- . 1931. Dynasties élamites d'Awan at de Šimaš. *RA* 28: 1–8.
- . 1932. *Actes juridiques susiens, suite: no. 166 à no. 327*, MDP 23. Paris: Paul Geuthner.
- . 1933. *Actes juridiques susiens; inscriptions des Achéménides*, MDP 24. Paris: Paul Geuthner.
- . 1939. *Mélanges épigraphiques*, MDP 28. Paris: Paul Geuthner.
- Seidl, U. 1986. *Die elamischen Felsreliefs von Kurangun und Nqsh-e Rostam*, Iranische Denkmäler 12/II/H. Berlin: Reichert.
- Sigrist, M. 1990. *Larsa Year Names*. Berrien Springs: Andrews University.
- Spycket, A. 1992. *Les figurines de Suse*. Vol. I. *Les figurines humaines. IVe-IIe millénaire J.-C.*, MDP 52. Paris: Gabalda.
- Steinkeller, P. 1982. The Question of Marhasi: A Contribution to the Historical Geography of Iran in the Third Millennium B.C. *ZA* 72: 237–265.
- . 1987. The Administration and Organization of Ur III State. In: Gibson, McG. and Biggs, R. (eds.) *The Organization of Power. Aspects of Bureaucracy in the Ancient Near East*. Chicago: Chicago University Press, 19–41.
- . 1988. On the Identity of the toponyms LÚ.SU(A). *JAOS* 108: 197–202.
- . 1990. More on LÚ.SU(A) = Šimaški. *NABU* 1990, no. 13.
- . 2007. New Light on šimaški and Its Rulers. *ZA* 97: 215–232.
- . 2011. Idattu of šimaški. In: George, A.R. (ed.) *Cuneiform Royal Inscriptions and Related Texts in the Schøyen Collection*. Bethesda: CDL Press, 21–22.
- . 2012. New Light on Marhashi and Its Contacts with Makkan and Babylonia. In: Giraud, J. and Gernez, G. (eds.) *Aux marges de l'archéologie. Hommage à Serge Cleuziou*. Lyon: De Boccard, 261–274.
- . 2014. On the Dynasty of šimaški: Twenty Years (or so) After. In: Kozuh, M., Henkelman, W.F.M. and Jones, C.E. (eds.) *Extraction and Control. Studies in Honor of Matthew W. Stolper*, SAOC 68. Chicago: Chicago University Press, 287–296.
- Steve, M.-J. 1987. *Nouveaux mélanges épigraphiques, Inscriptions royales de Suse et de la Susiane*, MDP 53. Nice: Paul Geuthner.
- . 1989. Des sceaux-cylindres de Simashki? *RA* 83: 13–26.
- Steve, M.-J. and Gasche, H. 1990. Le tell de l'Apadana avant les Achéménides. In: Vallat, F. (ed.) *Contribution à l'histoire de l'Iran. Mélanges offerts à Jean Perrot*. Paris: ERC, 15–60.
- . 1996. L'accès à l'au-delà, à Suse. In: Gasche, H. and Hrouda, B. (eds.) *Collectanea Orientalia Histoire, arts de l'espace et industrie de la terre. Etudes offertes en hommage à Agnès Spycket*, Civilisations du Proche-Orient Serie I, Archéologie et environnement 3. Neuchâtel: Recherches et Publications, 329–348.
- Steve, M.-J., Gasche, H. and De Meyer, L. 1980. La Susiane au deuxième millénaire: A propos d'une interprétation des fouilles de Suse. *Iranica Antiqua* 15: 49–154.
- . 2002. Suse. In: Briend, J. and Quesnel, M. (eds.) *Supplément au Dictionnaire de la Bible, Fasc. 73*. Paris: Letouzey and Ané, 359–511.
- Stolper, M.W. 1982. On the Dynasty of Šimaški and the Early Sukkalmahs. *ZA* 72: 43–67.
- Sumner, W.N. 1974. Excavations at Tal-i Malyan, 1971–1972. *Iran* 12: 155–180.
- . 1988. Maljan, Tall-e (Anshan). In: *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* Bd. VII. Berlin: de

- Gruyter, 306–320.
- . 1989. Anshan in the Kaftari Phase: Patterns of Settlement and Land Use. In: De Meyer, L. and Haerinck, E. (eds.) *Archaeologia Iranica et Orientalis: Miscellanea in Honorem Louis Vanden Berghe*. Ghent: University of Ghent, 135–161.
- Tallon, F. 1987. *Métallurgie susienne I: De la fondation de Suse au XVIII^e siècle avant J.C.* Paris: éditions de la Réunion des Musées Nationaux.
- Tanret, M. 1986. Fragments de tablettes pour des fragments d'histoire. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta historiae Aelamicae. Mélanges offerts à M.J. Stève*. Paris: ERC, 139–150.
- Tavernier, J. 2013. Elamite and Old Iranian Afterlife Concepts. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. Leiden-Boston: Brill, 471–489.
- Vallat, F. 1989. Le scribe Ibni-Adad et les premiers sukkalmah. *NABU* 1988, no. 14.
- . 1990. Réflexions sur l'époque des sukkalmah. In: Vallat, F. (ed.) *Contribution à l'histoire de l'Iran. Mélanges offerts à Jean Perrot*. Paris: ERC, 119–127.
- . 1991. La géographie de l'Elam d'après quelques textes mésopotémiens. In: De Meyer, L. and Gasche, H. (eds.) *Mésopotamie et Elam. Actes de la XXXVI^{ème} Rencontre Assyriologique Internationale, Gand, 10–14 juillet 1989*. Ghent: University of Ghent, 11–21.
- . 1993a. *Le noms géographiques des sources suso-élamites*, RGTC 11. Wiesbaden: Harrassowitz.
- . 1993b. Kuk-Našur and Ammisaduqa. *NABU* 1993, no. 39.
- . 1994. Succession royale en Elam au II^e millénaire. In: Gasche, H., Tanret, M., Janssen, C. and Degraeve, A. (eds.) *Cinquante-deux réflexions sur le Proche-Orient ancien, offertes en hommage à Léon de Meyer*. Leuven: Peeters, 1–14.
- . 1996a. L'Elam à l'époque pléo-babylonienne et ses relations avec la Mésopotamie. In: Durand, J.-M. (ed.) *Mari, Ebla et les Hurrites*, Amurru 1. Paris: ERC, 297–319.
- . 1996b. Šu-ilišu, Iddin-Dagan et Imazu, roi d'Anšan. *NABU* 1996, no. 87.
- . 1998. Elam, I. The History of Elam. In: *Encyclopaedia Iranica*, 8. London-New York: Columbia University, 301–313.
- . 1999. Le palais élamite de Susa. *Akkadica* 112: 34–43.
- . 2000. L'Elam du II^e millénaire et la chronologie courte. *Akkadica* 119–120: 7–17.
- . 2004. Le cylindre de Hute-kazan et la chronologie des premiers sukkalmah. *Akkadica* 125: 135–140.
- . 2007. Temti-Agun I. Un nouveau sukkalmah. *Akkadica* 128: 74–84.
- . 2009. Du règne de Kindadu à celui d'Atta-hušu. *NABU* 2009, no. 16.
- Van der Meer, P. 1935. *Textes scolaires de Suse*, MDP 27. Paris: Paul Geuthner.
- Van Dijk, J. 1978. Išbi'erra, Kindattu, l'homme d'Elam, et la chute de la ville d'Ur. *JCS* 30: 189–208.
- Van Koppen, F. 2013. Abiešuh, Elam and Ashurbanipal: New Evidence from Old Babylonian Sippar. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. Leiden-Boston: Brill, 377–397.
- Van Soldt, W.H. 1990. Matrilinearität A. In Elam. In: *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* Bd. VII. Berlin: de Gruyter, 586–588.
- Warburton, D. 2011. The Fall of Babylon in 1499: Another Update. *Akkadica* 132: 5–22.

- Wright, H.T. 1981. *An Early Town on the Deh Luran Plain: Excavations at Tepe Farukhabad*. Ann Arbor: University of Michigan.
- Wright, H.T. and Carter, E. 2003. Archaeological Survey on the Western Ram Hormuz Plain. In: Miller, N.F. and Abdi, K. (eds.). *Yeki bud, yeki nabud. Essays on the Archaeology of Iran in Honor of William M. Sumner*. Los Angeles: Cotsen Institute of Archaeology, 61–82.
- Wright, H.T. and Neely, J.A. 2010. *Elamite and Achaemenid Settlement on the Deh Luran Plain: Towns and Villages of the Early Empires in Southwestern Iran*. Ann Arbor: University of Michigan.
- Zadok, R. 1987. Peoples from the Iranian Plateau in Babylonia during the Second Millennium B.C. *Iran* 25: 1–26.

CHAPTER TWELVE

Elam in the Middle Elamite period



Behzad Mofidi-Nasrabadi

Introduction

After a long period during which the rulers of Elam named themselves *sukkalmah* (grand regent) and claimed sovereignty as the “*sukkalmah* of Elam and Shimashki”, the old title “king of Susa and Anshan” re-emerges in the royal inscriptions around the middle of the 2nd millennium BC (Vallat 1997). The reintroduction of the term “king” is realized first with the sign EŠŠANA and written later in Elamite language su-un-ki. The cities of Susa in Khuzestan and Anshan (Tall-e Malyan) in the province of Fars seem to be the capitals of the two main Elamite territories, Elam and Shimashki, respectively. The new royal nomenclature is attested until the reign of Shilhak-Inshushinak in the 12th century BC, after which ensued several centuries without documented evidence.

The common Middle Elamite periodization is formed by dividing the rulers of this period into three groups. The first (ME I) includes five rulers: Kidinu, Tan-Ruhuratir II, Shalla, Inshushinak-shar-ili, and Tepti-ahar (Steve, Gasche and De Meyer 1980: 92–100). Since Kidinu was generally assumed as the earliest of them, this group is sometimes alternatively named “Kidinuid”, though neither the chronological sequence of these rulers is clear, nor were there certain family ties between them. The second group of rulers (ME II) includes the successors of Igi-halki and is referred to also as the dynasty of Igihalkids. The third (ME III) concerns the third group of monarchs, known as Shutrukids after their founder Shutruk-Nahhunte I. The end of the Middle Elamite period is usually considered to be marked by the fall of Hutelutush-Inshushinak, the successor of Shilhak-Inshushinak ca. 1100 BC.

This historical periodization is not followed by all scholars. For example, Pierre de Miroschedji (1981) preferred to divide the Middle Elamite period into two phases based on the stratigraphy of the *Ville Royale* at Susa. Steve, Gasche and De Meyer (1980: 91–107) also propose two phases: 1475–1325 (ME I) and 1325–1075 BC (ME II). Later Steve (1992: 19) divided the Middle Elamite period from a philological point of view into two phases, further subdividing the second phase into ME IIA and ME IIB. The following table shows the

suggested dating by several scholars.

This chapter gives an overview of the current state of knowledge of the Middle Elamite period following a three-phase system (ME I-III), introducing new evidence to assist in clarification of the dating.

[Table 12.1 Proposed dating systems for the Middle Elamite period](#)

	<i>Steve, Gasche and De Meyer 1980: 91–107</i>	<i>Miroschedji 1981: Tab. 2</i>	<i>Carter and Stolper 1984: Tab. 4</i>	<i>Potts 1999</i>	<i>Steve, Vallat, and Gasche 2002–03: cols. 367–368</i>
Transitional	–	–	1600–1450	–	–
ME I	1475–1325	1500–1300	1450(?)–1330	1500–1400	1450–1400
ME II	1325–1075	1300–1000	1320–1215	1400–1200	1400–1050
ME III	–	–	1165–1120	1200–1100	–

Chronology

Middle Elamite I

In addition to the rulers Kidinu, Tan-Ruhuratir II, Shalla, Tepti-ahar, and Inshushinak-shar-ili, there was another king named Igi-hatet. This king is only attested in a single inscription, on a brick from Dehno (Deh-e-no), and his name was formerly incorrectly read as “Igi-halki” because the last sign was not clearly legible. A complete version of the text found in the storage of the National Car Museum of Iran was published in 2015 which reveals that the name of the king is not Igi-halki but Igi-hatet. Philological features, including the use of the sign EŠŠANA and the use of “the king of Susa and Anshan”, allow for its dating to the Middle Elamite period (Daneshmand and Abdoli 2015). This discovery brings forth two facts. Firstly, there was a king named Igi-hatet who also reigned in the first phase of the Middle Elamite period. Secondly, it is no longer certain that the Igi-halki mentioned as father of Pahir-ishshan and Attar-kittah in an inscription of Shilhak-Inshushinak (EKI 48) – previously identified as the king in the Dehno brick – was actually a king.

Thus, we can now identify six rulers for the ME I phase: Igi-hatet, Kidinu, Tan-Ruhuratir II, Shalla, Inshushinak-shar-ili, and Tepti-ahar. While Shalla appears without any title (Scheil 1902: 169–194), he is attested in a legal text from Susa in an oath formula similar to that used for Tepti-ahar (Scheil 1932: 327), and therefore his sovereignty over Elam could be expected. Although the exact order of the mentioned six rulers is uncertain, general opinion places Kidinu and Tan-Ruhuratir II in the early stages (Vallat 2000). Since the grammatical features of the newly discovered king Igi-hatet’s inscription seem to be closer the *sukkalmah* period (Daneshmand and Abdoli 2015), it may be assumed that he was the first Middle Elamite ruler.

Presently the main piece of evidence for the chronology of the ME I phase is a date formula on a tablet from Haft Tappeh, a large site 15 km southeast of Susa, which mentions “the year when the king expelled Kadashman-^dKUR.GAL” (Herrero 1976: 102). The tablet bears the seal impression of Athibu, who was the grand governor of the city Kabnak during the reign of Tepti-ahar. Herrero assumed that Kadashman-^dKUR.GAL should have been the Kassite king Kadashman-Enlil I (ca. 1369–1355 BC). Glassner expresses doubt over the validity of reading ^dKUR.GAL as Enlil but has not excluded it (Glassner 1991: 118–120; see also Steve, Gasche and De Meyer 1980: 97–100). Cole and De Meyer (1999) instead assume that ^dKUR.GAL could have been in this period an equivalent for the Kassite deity Harbe and the named individual was Kadashman-Harbe I (ca. 1400 BC). Their argument was adopted by Vallat (2000) but rejected by other scholars (Glassner 2000; Goldberg 2004).

Recent radiocarbon dating of samples from building level II at Haft Tappeh stemming from the reign of Tepti-ahar and Inshushinak-shar-ili places them between 1525 and 1435 BC (average values) (Mofidi-Nasrabadi 2015), earlier than the reigns of Kadashman-Enlil I and Kadashman-Harbe I. According to this result, the Kadashman-^dKUR.GAL mentioned in the tablet during the reign of Tepti-ahar could have been a formerly unknown individual. It must be noticed, however, that the results could point to a displacement between calibrated radiocarbon and historical dates in the order of 50–100 years and cannot be accepted with certainty.

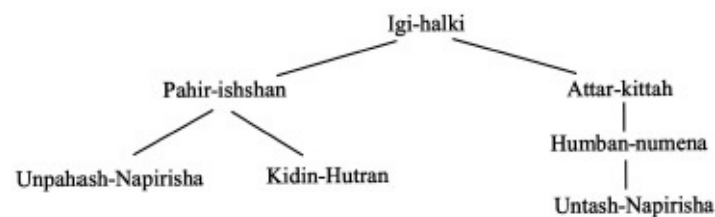
Middle Elamite II

The ME II phase was previously named after its founder Igi-halki, but now it has become clear that the only inscription that was presumed to belong to him actually belongs to another, earlier king named Igi-hatet (Daneshmand and Abdoli 2015). Since Igi-halki is no longer invoked in any text as the king, the first ruler of the dynasty must have been his first son Pahir-ishshan, who was mentioned about two centuries later in an inscription from the reign of Shilhak-Inshushinak (EKI 48). He is further attested together with his brother Attar-kittah in an inscription of Shutruk-nahhunte I (EKI 28A §19).

Based on these texts and other original inscriptions belonging to Attar-kittah, Humban-numena, and Untash-Napirisha (IRS 21–32; Steve 1967), the genealogy of the rulers in the ME II phase could be as follows: Pahir-ishshan, son of Igi-halki; Attar-kittah, son of Igi-halki; Humban-numena, son of Attar-kittah; Untash-Napirisha, son of Humban-numena; Unpashash-Napirisha, son of Pahir-ishshan; Kidin-Hutran, son of Pahir-ishshan.

This genealogy shows that there must have been two royal lines stemming from Igi-halki: the line of Pahir-ishshan and that of his brother Attar-kittah ([Figure 12.1](#)). Since the name of Pahir-ishshan is mentioned first in the inscriptions of Shilhak-Inshushinak and also of Shutruk-Nahhunte I, it is generally assumed that he was the eldest and reigned first. After these two

rulers, the sequence of the kings is not clear. Another text known as the “Berlin letter”, a Neo-Babylonian copy of a (pseudo?-)letter, introduces further confusion. In this text, an Elamite ruler whose name is no longer preserved draws on his Babylonian maternal line to lay claim to the Babylonian throne (van Dijk 1986). To underscore his right to the kingship, he alluded to a series of marriages between Elamite kings and Babylonian princesses, commencing with Pahiranu-^dU who is commonly supposed to be Pahir-ishshan. The marriage connections are described as follows:



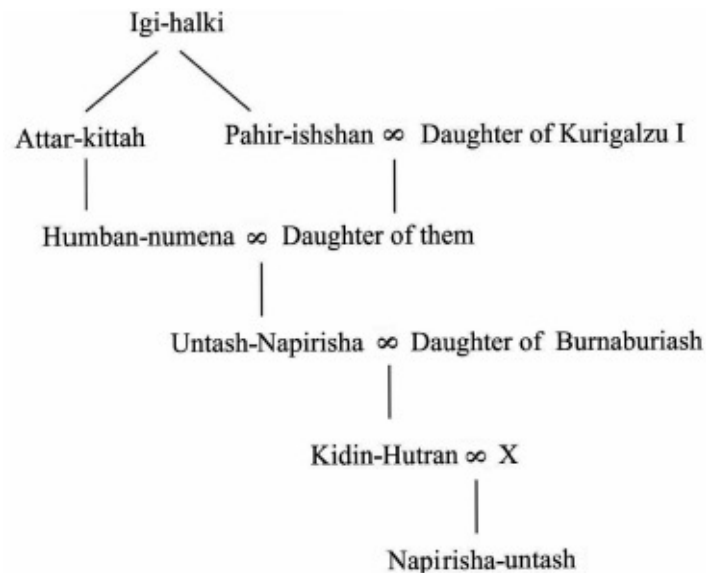
[Figure 12.1 The genealogy of the Igi-halki according to the inscription of Shilhak-Inshushinak.](#)

“Pahiranu- ^dU [married] ... of the mighty king Kurigalzu, Humban-immeni [married] his daughter, this one born (him) Hundasha-Napirisha. Hunda[sha-Napirisha] married the daughter of Burnaburiash, this one born (him) Kidin-[hud]uru[di]sh. Kidin-[hudurudish] marr[ied] the daughter of...-duniash, this one born (him) Nap[irisha-h]und[ash]. I, the [daughter’s]-son married the eldest daughter of Melishihu ...”

Because the text is fragmentary, several parts cannot be understood and a number of studies seeking to establish the chronology of the individuals have reached different conclusions. For example, the following questions are raised: Is the cited Kurigalzu the first (Steve and Vallat 1989; Potts 1999: 207; Vallat 2006) or the second (Goldberg 2004)? Did Pahiranu-^dU marry the daughter of Kurigalzu (Goldberg 2004; Vallat 2006) or her sister (van Dijk 1986)? Was Burnaburiash the well-known Kassite king (van Dijk 1986; Vallat 2006) or a prince (Goldberg 2004)? Whom did Kidin-hudurudish (Kidin-Hutran) marry since no Kassite king can be identified as the father of his wife? Is Pahiranu- ^dU with certainty Pahir-ishshan (van Dijk 1986: 164)? Who was the author of the letter?

Another problem is in regard to the genealogy of the rulers mentioned in the letter, which differs from the above-mentioned inscription of Shilhak-Inshushinak. The letter indicates Kidin-Hutran was son of Untash-Napirisha, while in the inscription of Shilhak-Inshushinak he is the son of Pahir-ishshan. Furthermore, the rulers in the Shilhak-Inshushinak inscription must have been from different family lines. It is unclear why they are arranged in that manner, as if they all were members of the same chain of descent and ancestors of the sender of the letter. Goldberg (2004) suggested that the passage of the letter “Pahiranu-^dU [married] ... of the mighty king Kurigalzu, Humban-immeni [married] his daughter” implies Humban-numena (Humban-immeni) married the daughter of Pahir-ishshan who was born through the marriage

to the daughter of Kurigalzu. If the suggestion of Goldberg is true, Untash-Napirisha and his son and grandson, Kidin-Hutran and Napirisha-untash, were not only offspring of Attar-kittah but also of Pahir-ishshan ([Figure 12.2](#)).



[Figure 12.2 Genealogy of Igihalkid proposed by Goldberg \(2004\).](#)

Concerning the last kings of this phase, Mesopotamian sources offer some information. According to Chronicle P, Babylonia was first conquered by Kidin-Hutran at the time of Enlil-nadin-shumi (1224 BC) and then during the reign of Adad-shuma-iddina (1222–1217) (Glassner 2004, no. 45, iv:14'–22'). It remains unclear whether this Kidin-Hutran was the same cited as son of Pahir-ishshan and the last king in the inscription of Shilhak-Inshushinak, or if he was the son of Untash-Napirisha as described in the “Berlin letter”. In both cases, he would have lived around the beginning of the 13th century and could not be the person who defeated Adad-shuma-iddina at the end of the 13th century. Because of this discrepancy, some scholars have suggested that there must have been two or even three rulers of this name and that the last one conquered Babylonia (Steve and Vallat 1989; Potts 1999: 207, Tab. 7.5; Vallat 2006).

Middle Elamite III

The synchronism between the Shutrukid kings and Babylonian rulers allow us to determine the absolute chronology of this last phase of the Middle Elamite period. The first ruler is Shutruk-Nahhunte I, who reigned in the 12th century and who had no direct link to the previous royal house. His presence is documented by several hundred inscribed bricks from Susa, Dehno, Chogha Pahan West and Liyan, close to Bushehr, naming him as son of Hallutush-Inshushinak (Malbran-Labat 1995: 79–83; Steve 1987: 20–26, 29). Since his father is not attested as a king, Shutruk-Nahhunte must have been the first ruler of the new dynasty. He is well known for his campaign against Zababa-shuma-iddina (1158 BC) and the conquest

of Babylonia, from where he brought booty such as the Naram-Sin stele and the stele of Hammurabi to his capital city of Susa (Frame 1995: no. B.2.4.6). His campaign against Babylonia has led to the assumption that he must have been the Elamite ruler who claimed his right over the Babylonian throne in the above-mentioned letter (Steve and Vallat 1989: 228; Potts 1999: 233; 2006; Goldberg 2004). Less likely is the suggestion of van Dijk (1986: 166) that the sender of the letter was Kutir-Nahhunte, son of Shurtruk-Nahhunte I, since he must have inherited the Babylonian throne from his father as argued by Potts (1999: 233).

The dominance of Elam over Babylonia persisted during the reign of Shilhak-Inshushinak, brother of Kutir-Nahhunte, who ascended the throne after him. In an Elamite inscription found near Dezful, Shilhak-Inshushinak probably describes his conquest of Sippar and other cities (Ganjavi 1976: 35–36). His successor Hutelutush-Inshushinak was the last king of the dynasty, who was defeated by Nabu-kudurri-usur I (1126–1104).

Textual sources

Written sources of the ME I phase are generally in the Akkadian language. Royal inscriptions are rare and limited to bricks of Igi-hatet (Daneshmand and Abdoli 2015), Inshushinak-shar-ili (IRS 19), and Tepti-ahar (IRS 20), describing temple constructions at Dehno and Susa. At Haft Tappeh archives of cuneiform tablets were discovered. One group of these texts originated from a workshop (Negahban 1991: 103–104; 1994) and contains information about deliveries of gold, silver, and other materials and some mention the recipient of the products (Herrero 1976; Herrero and Glassner 1990; 1991; 1993; 1996). Other archives were found in an administration building in the south part of the city that was used for storage of valuable objects (Mofidi-Nasrabadi 2010b: 19–23), hence the tablets are generally inventory lists (Prechel 2010). Other finds like letters, school exercises, and omens found in the 1970s show that there is probably a much larger corpus of texts yet to be uncovered at Haft Tappeh (Negahban 1991: 103–106).

Neither Haft Tappeh nor Susa provide us with legal texts concerning everyday judicial problems of citizens. Only some exemplars known as the “Malamir texts” supply information on this topic (Stolper 1990). Interestingly, a large percentage of the recurrent persons named in this legal archive were women. In 2014, other examples of the same text type were found at Tappeh Bormi.

In the ME II, a transformation in the use of Elamite language took place, with its first introduction into royal inscriptions by Humban-numena (Pézard 1914: 42–65; Vallat 1984; Malbran-Labat 1995: 59–61). His son Untash-Napirisha preferred to compose most of his inscriptions in Elamite and left behind a large number of inscribed bricks relating to his building activities in different cities, especially in Al-Untash-Napirisha, his new foundation at Chogha Zanbil. There he built a ziqqurrat and numerous temples for different deities in the holy area named *sian-kuk*, all incorporating inscribed bricks. Nearly all of these inscribed

bricks are attested also at Susa (published by Scheil in 1901). Since it is very unlikely that Untash-Napirisha built a duplicate of the *sian-kuk* at Susa, Hinz and Koch have surmised that the brick inscriptions were transported to Susa from Chogha Zanbil (Hinz and Koch 1987: 1329, UntN; see also Mofidi-Nasrabadi 2013b: 62–66). The same phenomenon might be observed in the inscribed bricks by Humban-numena also found at Susa mentioning the restoration of a temple for Napirisha and Kiririsha of Liyan (near modern Bushehr) (IRS 21).

In the last phase of the Middle Elamite period (ME III), the Shutrukid rulers, who generally used only the Elamite language for their texts, also left behind a large number of inscribed bricks. Of particular note is the lack of other text types such as legal or administrative documents in both this and the previous ME II period. It is unclear whether this is the result of chance or reflects a reduced utilization of writing in the social organization and everyday life in these phases.

Archaeological evidence

The vast excavations of Roman Ghirshman at the *Ville Royale* in Susa provided a large volume of material from the Middle Elamite period, even if the stratigraphic relationship of their context is not precise. The earliest Middle Elamite evidence is a seal impression of the ME I king Kidinu from the *Ville Royale* A XII. It is therefore suggested that the end phase of this level as well as the next level A XI, both of which have yielded a large quantity of pottery vessels, belong to the ME I (Gasche 1973; Steve, Gasche and De Meyer 1980: 92).

More evidence for ME I is found at Haft Tappeh, which was excavated first by E. Negahban from 1965 to 1978 (Negahban 1991) and by the present author starting from 2005 (Mofidi-Nasrabadi 2010b; 2012; 2014b). Because several seal impressions from the site include inscriptions mentioning Athibu as great governor of Kabnak (*šaknu* GAL *ša Kabnak*), this is presumed to be the ancient name of the city. It is difficult to determine Kabnak's extent, but geomagnetic prospection and surveys suggest an area of about 200–250 ha (Mofidi-Nasrabadi 2011a: 1). Negahban's excavations revealed a building incorporating two tombs and parts of two complexes with mud brick terraces, which he named "Terrace Complex I and II". Recent geophysical prospection showed that apart from the tomb building there were at least five monumental complexes (A-E) in this area, separated from each other by massive walls ([Figure 12.3](#)). The two terraces were situated in the southern corners of the complexes A and D, respectively. A large number of bronze weapons found on the floor of a room in the western corner of complex (D) indicate probable use of the room by guards. It seems that this complex was added later to complex C and the two were connected through a narrow corridor. Another corridor connected complex D with complex A (Mofidi-Nasrabadi 2010b; 2012). Excavations by Negahban in Complex B close to the terrace of complex A uncovered a workshop containing various finished and semi-finished products as well as raw materials,

indicating that the workshop's range of production was varied. A life-size clay head and a clay mask as well as objects of bone and ivory were retrieved from the rubble. Negahban (1991: 10) reported remains of the skeleton of an elephant, which could have served as raw material. A large oven for firing pottery was located in the courtyard in front of the workshop. Its form would not have allowed its use for bronze production as was suggested by Negahban (Rafiei-Alavi 2015: 323–326), though the presence of raw material, molds, a large variety of bronze objects, and textual records suggest that Haft Tappeh played a significant role in the manufacturing of bronze articles in the region (Rafiei-Alavi 2012; 2015).

The recent excavations in complex C and in the area at its northern side have yielded information about the stratigraphic sequence of different building levels. Apart from the Parthian and Sasanian remains, at least four Elamite building levels can be distinguished. The first (I) belongs to the *sukkalmah* era, while the other three (II–IV) stem from the first phase of the Middle Elamite period (Mofidi-Nasrabadi 2014b: 102–106). The urban development at Haft Tappeh reached its climax during building level II, which based on textual sources seems to belong to the reigns of Inshushinak-shar-ili and Tepti-ahar (Tab. 2). It is in this level that the monumental complexes were founded. Their remains in complex C were situated at the same level as the premises close to the terraces excavated by Negahban. Large quantities of pottery, especially oval vessels with knob-foot, as well as vessel stoppers, provide evidence that complex C was used for the management of foodstuff. Besides the monumental constructions on the northern side of the site, an administration building with a workroom for scribes, archives, and long storage rooms was found in the south part of the city. The tablets were generally inventories listing objects like arrows, quivers, harnesses, and riding equipment that were stored in the building (Prechel 2010). Burned roof beams and ash layers on the premises led to the assumption that it was destroyed by fire. A small structure was situated on the southeastern side of this construction and in one of its rooms an individual had been buried in a terracotta sarcophagus. Two cylinder seals amongst the grave goods are of great interest, as their inscriptions name the proprietor of the seals as Ginadu, the *puhu-teppu* (a highly ranked administration official) of the king Inshushinak-shar-ili. Most likely Ginadu worked as an official in the adjacent administration building (Mofidi-Nasrabadi 2011b).

inscribed stele fragment found in its courtyard (Negahban 1991: 102–103; Reiner 1973), is very speculative. There is no justification for the identification of this construction as a temple (Potts 1999: 196–198), and it is not certain that the structure stemmed from the reign of Tepti-ahar, as it must have belonged to the subsequent building level III. Furthermore, both tombs were constructed for multiple burials and do not show any characteristics of a royal funerary complex. The stele fragment could have been brought there secondarily, since another fragment of it was found in the courtyard of complex B (Mofidi-Nasrabadi 2003–2004: 231–232; 2013a: 170).

It is not certain whether the building activity of level III in complex C was completed, because no paved floor could be determined. Later, in level IV, people reused the remains of these thick walls and built their houses within them. At this time the remaining walls of level III could only have been about 50–80 cm high. In order to obtain the necessary height for the house ceilings, the soil within the walls of level III was dug out about 120–150 cm.

The end of the building level IV is marked by a tragic event. In a street close to the houses of complex C were amassed several hundred skeletons behind a wall. In other excavation areas some skeletons were also observed in the remains of level IV outside the graves. It is very likely that a massacre took place at this time, putting an end to the city’s life in the Middle Elamite period (Mofidi-Nasrabadi 2014b: 72–75, 105–106).

Beside architectural remains, a large number of pottery exemplars are attested in different building levels which provide evidence for an exact chronology of ME I assemblage. Many terracotta figurines were also discovered, among them a large quantity of the nude female figures with hands cupping both breasts. Other examples show clothed females, naked couples on beds, or (more rarely) male figures who usually play a lute.

It seems that Haft Tappeh lost its influence in the region after the devastation at the end of the building level IV and was abandoned. Scattered archaeological materials from the ME II phase are limited to pottery examples and terracotta figurines, which show certain similarity to those from Chogha Zanbil (Mofidi-Nasrabadi 2013b: 47–52). In contrast, the new foundation at Chogha Zanbil, situated about 40 km southeast of Susa, offers the most important textual and archaeological data for the following Middle Elamite phase. This important site was first excavated by Roland de Mecquenem in 1935–1939 and later by Roman Ghirshman between 1951 and 1962 (Ghirshman 1966; 1968). Geophysical prospection, surveys, and excavations were carried out by the author from 1999 to 2005 (Mofidi-Nasrabadi 2007; 2013b).

[Table 12.2 Relative chronology of different building levels in excavated areas at Haft Tappeh](#)

<i>Building Levels</i>	<i>Periods</i>	<i>Areas</i>
Building	<i>Sukkalmah</i>	Structures on the northwestern side of the tomb building

Level I	period	
Building	Middle	Administrative building; Complex A; Complex B; Complex
Level II	Elamite I	C; Complex D (?)
Building	Middle	Complex C; Tomb building
Level III	Elamite I	
Building	Middle	Complex C
Level IV	Elamite I	

The city, named Al-Untash-Napirisha (“the city of Untash-Napirisha”) or later Dur-Untash (“the fort of Untash”), was founded in the vicinity of the river Dez during the reign of Untash-Napirisha. It lay on a plateau, about 30–40 m higher than the riverbed. The city was conceived as a sacred center in which different temples of various Elamite deities were planned. However, the socio-economic aspects that played an important role for the development of urban life remained out of consideration. Although the city was founded near the Dez river, it was not possible to use the river water because of its elevated location. The surmise of Ghirshman regarding the presence of a 45 km long canal from the Karkheh river to Chogha Zanbil is highly speculative (Mofidi-Nasrabadi 2007: 26–28; 2013b: 308–311). The city lay on the highest point in the region and it was impossible that water flowed to the city from the surrounding area.

Since the sacred aspects of this new foundation played the fundamental role in its implementation, as mentioned explicitly in the brick inscriptions, the most important building, the ziqqurrat, took the central position in the city. It was dedicated to the deities Inshushinak and Napirisha and formed the holiest place enclosed by a wall. On the northwest side of this wall were situated temples for Ishmeqarab, Kiririsha, and Napirisha (for more architectural details see Mofidi-Nasrabadi, Chapter 25 in this volume). Other temples built at some distance from the ziqqurrat were surrounded by a second thick wall forming a holy district, while the whole city area was delimited by a 4-km-long outer wall ([Figure 12.4](#)). At about 500 m to the east of the ziqqurrat, Ghirshman excavated remains of two palaces and a funerary building with five subterranean tombs. Most likely the tombs were planned for the members of the royal family, but they must have been used secondarily by other individuals, since the sparse skeletal remains and grave goods do not allow for their classification as royal burials.

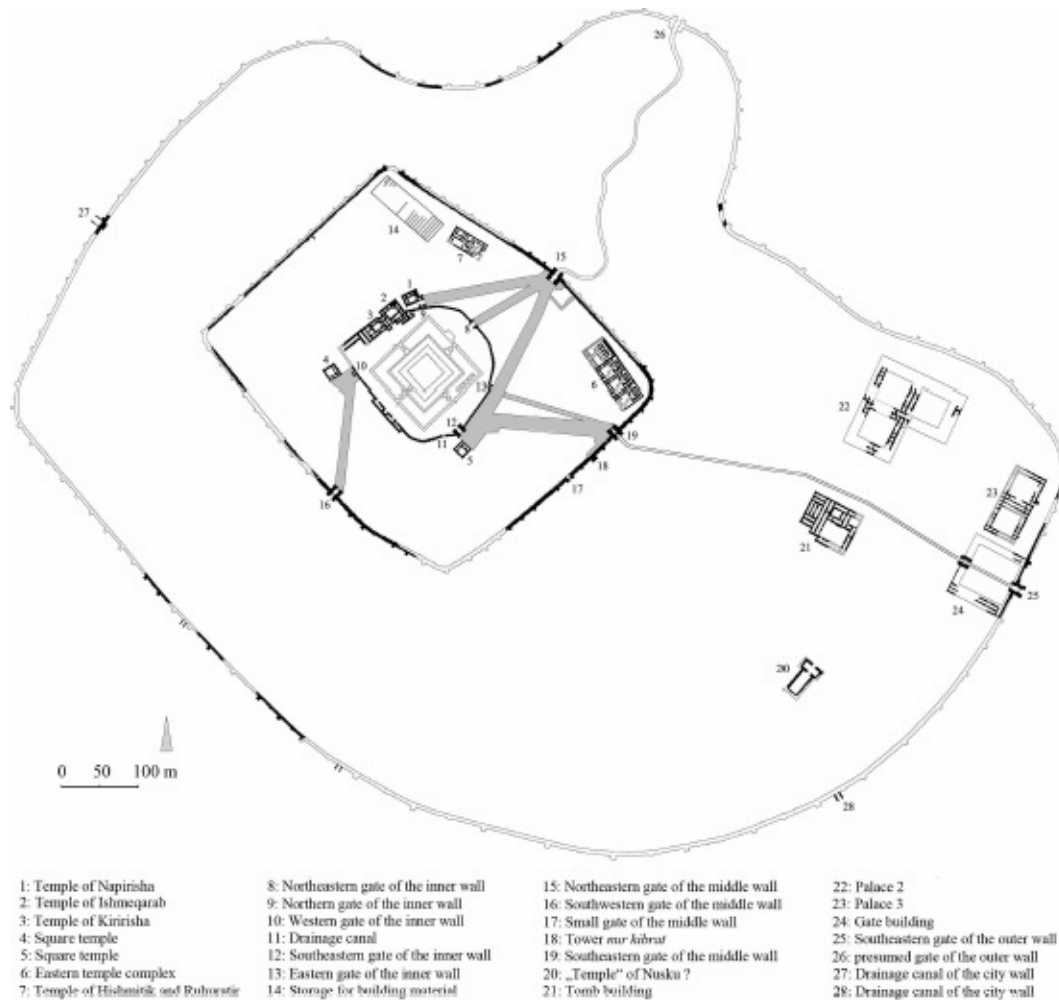
According to geophysical prospections, the residential area of the city was occupied with few constructions (Mofidi-Nasrabadi 2007: 46–90). Many houses could be observed in the holy district within the middle wall. Recent excavations showed that they do not belong to the period of the city foundation and were built later. Based on stratigraphic relationships and pottery assemblages, the three following building levels were determined for these structures (Mofidi-Nasrabadi 2007: 90–91):

Building level 3 (12th–11th century BC)

Building level 2 (10th–9th century BC)

Building level 1 (8th–7th century BC)

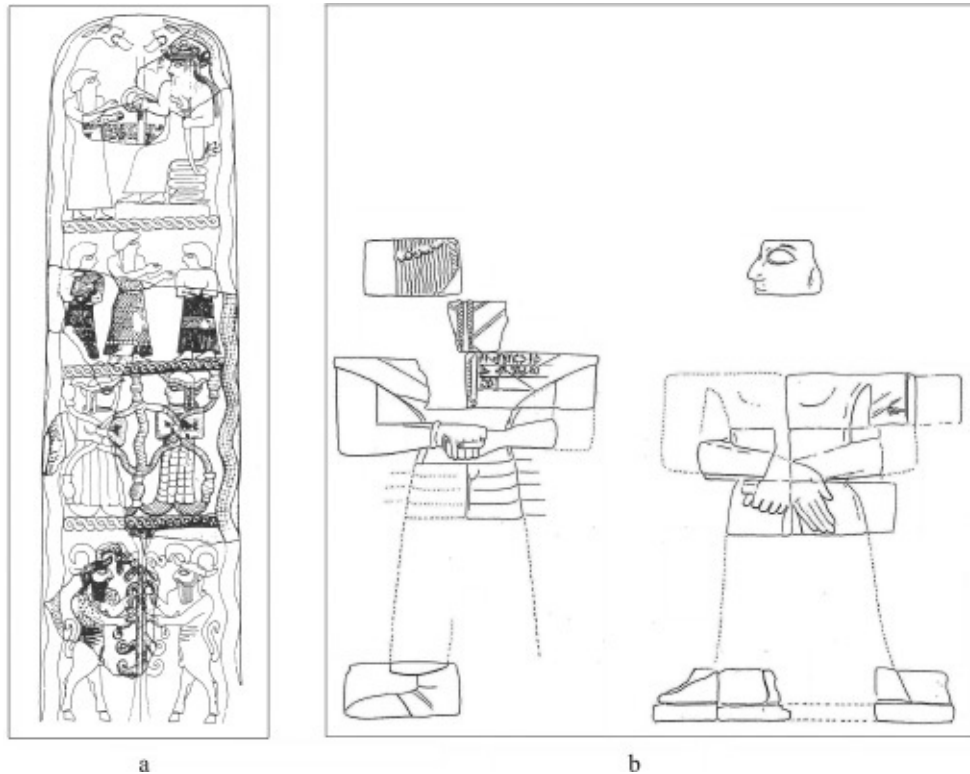
Urban life in Chogha Zanbil continued at least until the 7th century BC. Fragments of two glazed bull knobs similar to those from Susa dated to the 8th–7th centuries (Harper, Aruz, and Tallon 1992: 210) were found recently near the tomb building, which indicate the continued use of luxury goods into this period.



[Figure 12.4 Plan of the ancient city Al-Untash-Napirisha \(today's Chogha Zanbil\).](#)

During the reign of Untash-Napirisha, the temples were provided with statues and stelae. Shutruk-Nahhunte stated in one of his inscriptions that he brought to Susa several stelae (*suhmutu*^{MEŠ}) which Untash-Napirisha had placed in the *sian-kuk*, that is, in Chogha Zanbil (EKI 21). Therefore, it is generally supposed that the statue, as well as the stele of Untash-Napirisha found at Susa ([Figure 12.5a](#); Spycket 1981: 307 and Figure 75; Harper, Aruz, and Tallon 1992: 127–130, Figure 42), were placed originally at Chogha Zanbil (Vallat and Grillot 1978: 82, n. 3). Other inscriptions mention further objects transported from Anshan, Dur-Untash, and Tikni to Susa (EKI 20). Shutruk-Nahhunte's passion for collecting monuments in

his capital city resulted in the gathering of a vast number of them at Susa, including many transported by him from Mesopotamia (Potts 1999: 235, Tab. 7.9). Most of the indigenous Elamite art of the ME III phase is attested from the reign of Shilhak-Inshushinak. One of the most remarkable art objects is a cast bronze model depicting, based on its Elamite inscription, the *sit shamshi* (“sunrise” in Akkadian) ritual in which two nude male figures, probably priests, carry out a purification or a libation ritual (Harper, Aruz and Tallon 1992: 137–141).



[Figure 12.5 Artworks from the ME II and III phases; a: Stele of Untash-Napirisha \(after Harper, Aruz, and Tallon 1992: 80, Figure 42\); b: Brick reliefs of Shilhak-Inshushinak from Susa \(after Harper, Aruz, and Tallon 1992: 11, Figure 13\).](#)

A new artistic phenomenon occurred during the reign of Shilhak-Inshushinak with the use of brick reliefs similar to those of the Kassite period in Uruk. Several molded bricks were found at Susa belonging to facade panels showing a male figure together with a female (Figure 12.5b) as well as a standing bull-man with a date-palm and a standing female figure with hands raised in front of the chest (Harper, Aruz, and Tallon 1992: 11, 141–144, 281–282). An inscription (IRS 41) runs across the panels indicating the brick reliefs were part of a chapel for Inshushinak.

From the end of the Middle Elamite period scarce archaeological material is known. The presence of some inscribed bricks and glazed wall knobs from the reign of Hutelutush-Inshushinak at Susa and Tall-e Malyan (ancient Anshan) give evidence for this king’s building activities in both major Elamite centers.

Socio-political aspects

In the course of the Middle Elamite period, Elam became one of the most important political powers in the region. Its political and economic rise was mirrored by a certain cultural self-confidence. The rulers no longer referred to themselves as *sukkalmah* (“grand regent”), but rather as “king of Susa and Anshan”. The usage of the Elamite language in the royal texts intensified. At the beginning of the Middle Elamite period, inscriptions were still written in Akkadian, as in the preceding *sukkalmah* era, but in the ME II and particularly ME III the rulers favored the use of Elamite. Furthermore, in these Elamite texts they adopted the title of “the king of Anshan and Susa”, prioritizing the name of Anshan (Vallat 1997); in doing so they followed the old tradition of the Shimashkian rulers from the beginning of the 2nd millennium BC (Mofidi-Nasrabadi 2010a: 111).

The expansion of Elam’s political role in the region also transformed the traditional power constellation of the preceding period, which was based on a tripartite system of *sukkalmah* (ruler of the empire), *sukkal* of Elam (“regent of Elam”, probably the title of the viceroy), and *sukkal* of Susa (probably the governor of Susa) (Mofidi-Nasrabadi 2009: 22–37). In contrast, Middle Elamite political supremacy gives the impression of having been concentrated in the hand of the king alone. In the formulaic oath in *sukkalmah* legal tablets, for example, usually the king (*sukkalmah*), viceroy (*sukkal* of Elam), and sometimes even governor of Susa (*sukkal* of Susa) are cited, while in the Middle Elamite period “Malamir” tablets only the king was invoked. Other royal family members are mentioned in inscriptions of ME II and III but not as political entities.

In the early phase of the Middle Elamite period, different cities were governed by local authorities who were also named EŠŠANA (“king”). In tablets from Haft Tappeh, such regional governors are mentioned for Huhnur, Anshan, and Halisrati during the reign of Tepti-ahar (Herrero and Glassner 1990: no. 30; 1993: no. 165). Furthermore, there are other positions like *šaknu* (“governor”), which was held by Athibu, the grand mayor of the city Kabnak in the reign of Tepti-ahar (Herrero 1976: 102–103). However, the ultimate authority of the king can be observed in the use of his seal in the city organization at Haft Tappeh. Compared to other elite seals, that of Tepti-ahar was evidently used more often for administrative purposes, obviously in order to maintain full control over the government (Mofidi-Nasrabadi 2011a: 287–288). A record of large cattle herds during his reign indicates his supervision over all administration details: “46 oxen of Ishepiltirra, 30 oxen of Tashritu – total: 76 oxen, administrative responsibility of Atta-Napir which the king investigates and adds to the royal cumulative record (lit. ‘big tablet of the king’)” (Beckman 1991). Textual evidence points to a well-organized administration system controlled by the king. All deliveries of raw materials and objects seem to have been registered by special officials, named *puhu-teppu*. One of them was the above-mentioned Ginadu who worked during the reign of Inshushinak-shar-ili

(Mofidi-Nasrabadi 2011b). Other *puhu-teppus* are cited in a letter together with the concierge and guardians of a temple who are to deliver a grand chariot (Herrero 1976, no. 8 = H.T. 2).

No indications for the distribution of power can be witnessed with the transition to the next phases under the so-called Igihalkid rulers and later the Shutrukids. Royal family members are cited in inscriptions as an elite group but lack any official position. Interestingly, it seems that the socio-political role of female members was increased progressively during the period. In the ME I phase, the “Malamir texts” demonstrate already the high influence of women in civil society, their right to own property, and their participation in court proceedings. In the ME II, Humban-numena alluded to being chosen (as king) by god Napirisha due to his maternal line (Pézard 1914: 42–65; MDP 53 14, no. 4; IRS 21). He repaired the temple and gave it to the deities Napirisha and Kiririsha for his life and for the life of Mishimruh and Rishap-La. The two cited female persons could have been his family members, maybe his mother and his wife. Analogous to this, his son Untash-Napirisha is presented on a stele together with two female figures ([Figure 12.5a](#); Harper, Aruz and Tallon 1992: 127–130, no. 80) who can be identified as Napirasu, his spouse, and Utik based on the inscriptions over their arms (Vallat 1981: 28; EKI 16). Utik was a priestess and is generally interpreted as Untash-Napirisha’s mother (Pézard 1916: 122). Napirasu is also attested by a near life-size bronze statue, one of the most exceptional discoveries at Susa, which bears an Elamite inscription over the skirt invoking the deities Napirisha, Kiririsha, and Inshushinak (EKI 16; Harper, Aruz and Tallon 1992: 132–135, no. 83). At the end of the text are cited offerings which were most likely donated to her statue. This fact underlines her position in religious rituals and can be considered as a sign of her political and social influence in the royal court.

In the next phase, the citing of the female family members became a permanent element of Shutrukid royal inscriptions. One of the most important personalities of this period was Nahhunte-utu, who is mentioned in inscriptions of Kutir-Nahhunte, Shilhak-Inshushinak, and Hutelutush-Inshushinak. She was the spouse of Shilhak-Inshushinak and mother of Hutelutush-Inshushinak as well as at least eight other children. In one inscription, Nahhunte-utu appears as joint author together with king Shilhak-Inshushinak (EKI 40). Many scholars surmise that she was a sister of Kutir-Nahhunte and Shilhak-Inshushinak and was first married to Kutir-Nahhunte, because in one inscription Kutir-Nahhunte offers the reconstruction of a temple at Liyan for his own life and the lives of Nahhunte-utu and her children (EKI 31). Furthermore, it is suggested that she was the mate of her father Shutruk-Nahhunte and later of her son Hutelutush-Inshushinak, though this is not well founded (Stolper 1998). Although the exact role of Nahhunte-utu cannot be clarified, her continued presence in the royal inscriptions is evidence of her exceptional social and political position. The above-mentioned brick relief panel at Susa depicting a royal couple from the reign of Shilhak-Inshushinak most probably shows Nahhunte-utu with this king ([Figure 12.5b](#)). The depiction of female members of Elamite royal families together with rulers in the arts of ME II and III is in contrast to

Mesopotamia and goes back to a long tradition in the eastern regions of Elam attested in so-called Shimashkian glyptic from the beginning of the 2nd millennium BC (Mofidi-Nasrabadi 2009: 53–54). This probably arises from the significant social role of women in the Elamite community and could go back to a matrilineal form of social organization often proposed for the early era of Elamite history.

Without doubt, the intensive building activities and military and political expansion observed in the Middle Elamite period were connected to Elam's economic development. The socio-political development in this time caused an increasing request for pottery vessels, especially of the so-called "Knopfbecher" that was most likely used for beverage rations, probably beer, of building workers. Improvements in serial production resulted in lower-quality products and a trend towards a simplified shape (Mofidi-Nasrabadi 2014a). The vast building undertakings required changes in the production of manufactured articles in order to optimize the balance of supply and demand.

Undoubtedly the building and military activities can be considered as royal undertakings carried out through centralized power. Textual sources do not allow for the illumination of the quotidian in the Middle Elamite era. In the absence of private documents like those available for the *sukkalmah* era, the social and economic nature of everyday urban life remains to be charted.

Abbreviations

- EKI Royal inscriptions in Elamite published in König 1965.
IRS Royal inscriptions in Elamite and Akkadian from Susa (and Chogha Zanbil) published in Malbran-Labat 1995.
MDP Elamite and Achaemenid royal inscriptions from Susa and Susiana published in 53 Steve 1987.

Bibliography

- Beckman, G. 1991. A stray tablet from Haft Tépé. *Iranica Antiqua* 26: 81–83.
Carter, E. and Stolper, M. 1984. *Elam: Surveys of Political History and Archaeology*, University of California Near Eastern Studies Series 25. Berkeley – Los Angeles – London: University of California.
Cole, A.W. and De Meyer, L. 1999. Tepti-ahar, King of Susa, and Kadašman-^dKUR.GAL. *Akkadica* 112: 44–45.
Daneshmand, P. and Abdoli, M. 2015. A New King of Susa and Anshan. *Cuneiform Digital Library Bulletin* 2015:001, <http://cdli.ucla.edu/pubs/cdlb/2015/cdlb2015_001.html>.
Frame, G. 1995. *Rulers of Babylonia. From the Second Dynasty of Isin to the End of Assyrian Domination (1157–1612 BC)*, The Royal Inscriptions of Mesopotamia. Babylonian Periods, 2. Toronto – Buffalo – London: University of Toronto Press.

- Ganjavi, S. 1976. Survey in Xuzestān, 1975. In: Bagherzadeh, F. (ed.) *Proceedings of the IVth Annual Symposium on Archaeological Research in Iran. Muzeh-e Irān-e Bāstān Tehran Iran, 3rd–8th November 1975*. Tehran: Iranian Centre for Archaeological Research, 34–39.
- Gasche, H. 1973. *La poterie élamite du deuxième millénaire a.C.*, Mémoires de la Délégation Archéologique en Iran 47. Leiden: Brill, Paris: Geuthner.
- Ghirshman, R. 1966. *Tchoga Zanbil (Dur Untash), Volume I, La Ziggurat*, Mémoires de la Délégation Archéologique en Iran 39. Paris: Librairie Orientaliste Paul Geuthner.
- . 1968. *Tchoga Zanbil (Dur Untash), Volume II, Temenos, Temples, Palais, Tombes*. Mémoires de la Délégation Archéologique en Iran 40. Paris: Librairie Orientaliste Paul Geuthner.
- Glassner, J.-J. 1991. Les Textes de Haft Tépé, la Susiane et l'Elam au 2eme Millénaire. In: De Meyer, L. and Gasche, H. (eds.) *Mésopotamie et Elam. Actes de la XXXVIème Rencontre Assyriologique Internationale*, Mesopotamian History and Environment, Occasional Publications 1. Ghent, 109–126.
- . 2000. ^dKUR.GAL à Suse et Haft-Tépé. *Nouvelles Assyriologiques Brèves et Utilitaires* 2000/36.
- . 2004. *Mesopotamian Chronicles*, Writing from the Ancient World 19. Atlanta: Society of Biblical Literature. Leiden: Brill.
- Goldberg, J. 2004. The Berlin Letter, Middle Elamite Chronology and Sutruk-Nahhunte I's Genealogy. *Iranica Antiqua* 39: 33–42.
- Harper, P.O., Aruz, J. and Tallon, F. 1992. *The Royal City of Susa: Ancient Near Eastern Treasures in the Louvre*. New York: Metropolitan Museum of Art.
- Herrero, P. 1976. Tablettes administratives de Haft-Tépé. *Cahiers de la Délégation Archéologique Française en Iran* 6: 93–116.
- Herrero, P. and Glassner, J.-J. 1990. Haft-Tépé: choix de textes I. *Iranica Antiqua* 25: 1–45.
- . 1991. Haft-Tépé: choix de textes II. *Iranica Antiqua* 26: 39–80.
- . 1993. Haft-Tépé: choix de textes III. *Iranica Antiqua* 28: 97–135.
- . 1996. Haft-Tépé: choix de textes IV. *Iranica Antiqua* 31: 51–82.
- Hinz, W. and Koch, H. 1987. *Elamisches Wörterbuch (in 2 Teilen)*, Archäologische Mitteilungen aus Iran, Ergänzungband 17. Berlin: Dietrich Reimer Verlag.
- König, F.W. 1965. *Die elamischen Königsinschriften*, Archiv für Orientforschung, Beiheft 16. Graz.
- Malbran-Labat, F. 1995. *Les inscriptions royales de Suse. Briques de l'époque paleo-élamite à l'Empire néo-élamite*. Paris: Éditions de la Réunion des musées nationaux.
- Miroschedji, P. de 1981. Fouilles du chantier Ville Royale II à Suse (1975–1977): I. Niveaux élamites. *Cahiers de la délégation archéologique française en Iran* 12: 9–136.
- Mofidi-Nasrabadi, B. 2003–2004. Archäologische Untersuchungen in Haft Tappeh (Iran). *Archäologische Mitteilungen aus Iran und Turan* 35–36: 225–239.
- . 2007. *Archäologische Ausgrabungen und Untersuchungen in Čogā Zanbil*. Münster: Agenda Verlag.
- . 2009. *Aspekte der Herrschaft und Herrscherdarstellungen in Elam im 2. Jt. v. Chr.*, Alter Orient und Altes Testament 356. Münster: Ugarit-Verlag.
- . 2010a. Herrschaftstitulatur der Könige von Susa und Anšan. *Akkadica* 131/2: 109–119.

- . 2010b. *Vorbericht der archäologischen Ausgrabungen der Kampagnen 2005–2007 in Haft Tappeh (Iran)*. Münster: Agenda Verlag.
- . 2011a. Die Glyptik aus Haft Tappeh. Interkulturelle Aspekte zur Herstellung und Benutzung von Siegeln in der Anfangsphase der mittelelamischen Zeit. *Elamica* 1.
- . 2011b. The Grave of a *puhu-teppu* from Haft Tappeh. *Akkadica* 132: 151–161.
- . 2012. Vorbericht der archäologischen Ausgrabungen der Kampagnen 2008–2010 in Haft Tappeh (Iran). *Elamica* 2: 55–159.
- . 2013a. Some Chronological Aspects of the Building Structures at Haft Tappeh. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives, Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. Leiden – Boston: Brill, 161–172.
- . 2013b. *Planungsaspekte und die Struktur der altorientalischen neugegründeten Stadt in Chogha Zanbil*. Aachen: Shaker Verlag.
- . 2014a. Qualitative Veränderungen in der serienmäßigen Herstellung des Knopfbeckers in der Spätbronzezeit Elams. In: Luciani, M. and Hausleiter, A. (eds.) *Recent Trends in the Study of Late Bronze Age Ceramics in Syro-Mesopotamia and Neighbouring Regions, Proceedings of the International Workshop in Berlin, 2–5 November 2006*, *Orient-Archäologie* 32. Rahden: Verlag Marie Leidorf, 385–398.
- . 2014b. Vorbericht der archäologischen Ausgrabungen der Kampagnen 2012–2013 in Haft Tappeh (Iran). *Elamica* 4: 67–167.
- . 2015. Ergebnisse der C14-Datierung der Proben aus Haft Tappeh. *Elamica* 5: 7–36.
- Negahban, E.O. 1991. *Excavations at Haft Tape, Iran*, University Museum Monograph 70. Philadelphia: University of Pennsylvania.
- . 1994. The Artist's Workshop of Haft Tepe. In: Gasche, H. et al. (eds.) *Cinquante-deux reflexions sur le proche-orient ancien Offertes en hommage à Léon De Meyer*, *Mesopotamian History and Environment, Occasional Publications* 2. Gent: Peeters, 31–41.
- Pézard, M. 1914. *Mission à Bender-Bouchir. Documents archéologiques et épigraphiques*, *Mission archéologique de Perse* 15. Paris: Ernest Leroux.
- . 1916. Reconstitution d'une stèle d'Untaş^{NAP}GAL. *Revue d'assyriologie et d'archéologie orientale* 13: 119–124.
- Potts, D.T. 1999. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*. Cambridge: Cambridge University Press (2nd edition 2016).
- . 2006. Elamites and Kassites in the Persian Gulf. *Journal of Near Eastern Studies* 65/2: 111–119.
- Prechel, D. 2010. Die Tontafeln aus Haft Tappeh 2005–2007. In: Mofidi-Nasrabadi, B., *Vorbericht der archäologischen Ausgrabungen der Kampagnen 2005–2007 in Haft Tappeh (Iran)*. Münster: Agenda Verlag, 51–57.
- Rafiei-Alavi, B. 2012. Ein Hinweis auf die Herstellungsmethode eines Dolchtyps aus Haft Tappeh. *Elamica* 2: 169–175.
- . 2015. *Archäologische Untersuchungen der Metallartefakte aus Haft Tappeh*. Diss. Johann Wolfgang Goethe-Universität Frankfurt.
- Reiner, E. 1973. Inscription from a Royal Elamite Tomb. *Archiv für Orientforschung* 24: 87–102.
- Scheil, V. 1901. *Textes élamites-anzanites, première série*. Délégation en Perse, Mémoires 3. Paris: Ernest Leroux.

- . 1902. *Textes élamites-sémitiques, deuxième série*. Délégation en Perse, Mémoires 4. Paris: Ernest Leroux.
- . 1932. *Actes juridiques Susiens (Suite: n° 166 à n° 327)*, Mémoires de la mission archéologiques de Perse 23. Paris: Librairie Ernest Leroux.
- Spycket, A. 1981. *La statuaire du Proche-Orient ancien*, Handbuch der Orientalistik, Abteilung 7, Band 1, Abschnitt 2B, Lieferung 2. Leiden – Köln: Brill.
- Steve, M.-J. 1967. *Tchoga Zanbil (Dur-Untash). Volume III. Textes élamites et accadiens de Tchoga Zanbil*, Mémoires de la délégation Archéologique en Iran 41. Paris: Librairie Orientaliste Paul Geuthner.
- . 1987. *Nouveaux mélanges épigraphiques: Inscriptions royales de Suse et de la Susiane*. Mémoires de la delegation archéologique en Iran 53. Nice: Éditions Serre.
- . 1992. *Syllabaire Elamite. Histoire et paleographie*. Neuchâtel – Paris: Recherches et Publications.
- Steve, M.-J., Gasche, H. and De Meyer, L. 1980. La Susiane du deuxième millénaire: à propos d’une interprétation des fouilles de Suse. *Iranica Antiqua* 15: 49–154 and pls. I–VI.
- Steve, M.-J. and Vallat, F. 1989. La dynastie des Igihalkides: nouvelles interprétations. In: De Meyer, L. and Haerinck, E. (eds.) *Archaeologia Iranica et Orientalis, Miscellanea in honorem Louis Vanden Berghe*. Gent: Peeters Publishers, 223–238.
- Steve, M.-J., Vallat, F. and Gasche, H. 2002–2003. Suse A-G3. In: Briend, J. and Quesnel, M. (eds.) *Supplément au Dictionnaire de la Bible* 73–74. Paris: Letouzey & Ané, Éditeurs, cols. 359–596, 620–652.
- Stolper, M.W. 1990. Malamir: B. Philologisch. *Reallexikon der Assyriologie* 7/3–4: 276–281.
- . 1998. Nahhunte-utu. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 9: 84–86.
- Vallat, F. 1981. L’inscription de la stele d’Untash-Napirisha. *Iranica Antiqua* 16: 27–33.
- . 1984. Une inscription cunéiforme de Bouchir. *Dédalo* 23: 255–260.
- . 1997. La politesse élamite à l’époque des Igihalkides. *Nouvelles Assyriologiques Brèves et Utilitaires* 1997/74.
- . 2000. L’Elam du II^e millénaire et la chronologie courte, *Akkadica* 119–120: 7–17.
- . 2006. La chronologie méso-élamite et la lettre de Berlin. *Akkadica* 127/2: 123–136.
- Vallat, F. and Grillot, F. 1978. Le verbe élamite “pi(š)ši”. *Cahiers de la Délégation Archéologique Française en Iran* 8: 81–84.
- van Dijk, J. 1986. Die dynastischen Heiraten zwischen Kassiten und Elamern: eine verhängnisvolle Politik. *Orientalia* 55: 159–170.

CHAPTER THIRTEEN

The last centuries of Elam

The Neo-Elamite period



Elynn Gorris and Yasmina Wicks

Introduction

Spanning the centuries from the fall of the powerful Middle Elamite Šutrukid dynasty (c. 1100 BCE) to the rise of the Achaemenid Persian empire (520 BCE) was the Neo-Elamite period, a time of rapid development in southwest Iran characterized by an increasing cultural diversity and political vitality. During this time, Elam is thought to have roughly encompassed today's provinces of Khuzistan and Fars, remaining as it had been throughout its history a dual highland-lowland cultural entity (Álvarez-Mon 2010: 4–5). Yet our picture of this unique personality remains rather unbalanced because surveys and excavations have focussed largely on the lowland areas, leaving the highland territories relatively unknown.

This overview of Elam in the first half of the 1st millennium commences with a review of Neo-Elamite periodisation and a presentation of the still much-debated dynastic sequences. It will then introduce the reader to the various sites that have produced material evidence for this period of southwestern Iran's history and finish with a brief commentary on Neo-Elamite society.

Neo-Elamite periodisation

Scholars have yet to reach a general agreement on a suitable chronology for the Neo-Elamite period, and consequently there are several possible subdivisions based on archaeological, historical or philological material (Table 13.1). From the material evidence at Susa, Pierre de Miroschedji (1981b) determined two Neo-Elamite phases: NE I (1000–725/700 BCE) and NE II (725/700–520 BCE). Using historical data from textual sources, various other scholars have instead defined a tripartite division: NE I (c. 1100/1000–1760/743 BCE), NE II (760/743–653/646

BCE) and NE III (653/646–539/520 BCE). Based on internal linguistics Marie-Joseph Steve (1992: 21–23) established a relative chronology for the late NE III texts and further divided the late NE III period in two sub-phases, A (653–605) and B (605–539). The question of whether the Neo-Elamite period should be concluded at 539 with Cyrus II's ascent to power or with the suppression of the last Elamite revolts during 522–520 by Darius I, as commemorated in his Bisitun inscription, remains open to debate, but in the absence of material evidence for Persian rule at Susa before the latter's reign, it is likely that some part of Elam, including Susa, was retained by Elamite rulers until c. 520 (Henkelman 2003b: 262).

[Table 13.1 Various periodizations proposed for the Neo-Elamite period](#)

	<i>de Miroschedji (1981b)</i>	<i>Steve (1992: 21–22)</i>	<i>Vallat (1996)</i>	<i>Waters (2000: 3)</i>	<i>Malbran- Labat (2012)</i>	<i>Gorris (2014: 34–36)</i>	<i>Potts (2016: 249–50)</i>
NE I A	1000–	1000–900	1100–770	1000–743	1000–760	1100–760	1000–744
NE I B	725/700	900–750					
NE II	725/	750–653	770–646	743–646	760–653	760–646	743–646
NE III A	700–520	653–605	646–585	646–539	653–539	646–520	646–539
NE III B		605–539	585–539				

Neo-Elamite royal dynasties

Two main groups of textual sources, one Mesopotamian and the other Elamite, and also some biblical references (Daniel 8:2; Jeremiah 49:34–39) provide information on Neo-Elamite history. With only a dozen kings attested in indigenous sources over 500 years, scholars have relied heavily on Mesopotamian documentation for their historical reconstructions. Yet these external sources – the Babylonian chronicles (ABC), the Neo-Assyrian royal inscriptions (BIWA, RIMA, RINAP) and the Assyrian state correspondence (ABL; SAA; de Vaan 1995) – must be studied critically. The internal corpus comprises royal monumental inscriptions (EKI 71–73; EKI 77–89; IRS 57–62), inscriptions of Elamite officials (EKI 74–76; Basello 2013), administrative and legal texts (MDP 9; MDP 11 301–309; Weissbach 1902), omens (Scheil 1917: 24) and inscribed seals (Amiet 1973) and other objects (Henkelman 2003a; Álvarez-Mon 2010). Since they do not provide a consistent chronological framework, scholars can only establish a relative chronology for these sources based on linguistic and paleographical criteria.

The dark ages (c. 1100–760 BCE)

After the late Middle Elamite king Hutelutuš-Inšušinak (c. 1120–1100) was defeated by Babylonian Nebuchadnezzar I at Ulāia River (RIMA 2 35:41–43), historical information on

Elam is scant for over 300 years. Nevertheless, a group of Elamite economic texts from Tal-e Malyan that may date to the early Neo-Elamite period (Stolper 1984: 7) and occasional Mesopotamian references suggest these Elamite “Dark Ages” are not so dark as they initially seem. The Dynastic Chronicle (984–979 BC; ABC 18:13; RIMA 2 87–89) describes a Babylonian king Mār-bīti-apla-ušur as a remote descendant of Elam, and we learn that in 814 an Elamite garrison delivered military support to the Babylonian king Marduk-balāssu-iqbi (818–813) against Assyrian Šamši-Adad V (823–811) in the battle of Dur-Papsukkal (RIMA 3 A.0.103iv 38). After an Assyrian victory, it is reported that the people of Der, Parsumaš and Bit-Bunakki abandoned their cities and sought shelter in Elam (SAA 3 41). In the subsequent decades, a document dated to the reign of Assyrian king Adad-nirari III (811–783) mentions an Elamite ambassador at the Nimrud court and wine rations for Elamite court employees (Dalley and Postgate 1984: 145 iv 13, iv 26). Taken together, these references intimate a royal authority in Elam from the late 9th century onwards.

The first Neo-Elamite dynasty (c. 760–689 BCE)

Fifty years after the battle of Dur-Papsukkal, a Chronicle (CM 52, iii 7, 21) describes the transfer of inhabitants, women and/or precious gems to Elam on two different occasions by the Babylonian king Nabû-šuma-iškun (760–748). Although the name of an Elamite king is not mentioned, these lavish gifts indicate that Elam was already of great importance to Babylonia before the reign of Huban-nikaš I (743–717), the earliest Neo-Elamite king named in the Babylonian Chronicle (ABC 1 9–10), and that the first Neo-Elamite dynasty must have commenced before his accession (Henkelman 2003b: 253). Assurbanipal’s Annals (BIWA 54 F v 34–39) present Huban-nikaš I as the son of Huban-tahra; perhaps he was the Elamite regent who initially sought rapprochement with the Babylonians, resulting in an alliance a generation later between Huban-nikaš I and Merodach-baladan II against Assyria in the battle of Der in 720.

The Babylonian Chronicle provides a sequence of kings from Huban-nikaš I to the accession of Urtak (675–664). The first king, Huban-nikaš I, was succeeded by his nephew or *mar aḫatišu*, Šutruk-Nahhunte II (717–699) (ABC 1, i 38–40). In the titulary of a text written on a Neo-Elamite foundation stone (EKI 72), an alabaster monumental horn (EKI 71), a stele (EKI 73) and a glazed wall figurine (Amiet 1967: 36–37), Šutruk-Nahhunte identifies himself as the son of Huban-immena who, being omitted from the Babylonian Chronicle’s dynastic sequence and the Annals of Assurbanipal (BIWA 54 F v 34–39, 241), seems to have been an Elamite nobleman who had married the king’s sister (Gorris 2014: 46–53) and never ascended the throne himself (contra Vallat 1996: 389–340; Waters 2000: 16–18, 25–27).

In the Babylonian Chronicle (ABC 1, ii 32–4), Šutruk-Nahhunte II is succeeded by his younger brother “Hallušu” or Hallutuš-Inšušinak I (699–693), who ruled Elam for six years.

Yet these regnal years and descent – Huban-immena should be his father – do not correspond to the 15 Elamite bricks (EKI 77; IRS 58) on which Hallutuš-Inšušinak nominates himself son of Huban-tahra or to a Babylonian adoption contract dating to his 15th regnal year (Weisberg 2003: 1; Tavernier 2014). Paleography and linguistic analyses, in fact, date the brick inscriptions to the Neo-Elamite III (Vallat 1996: 390, 393), making Hallutuš-Inšušinak, son of Huban-tahra, nearly a century younger than the Hallušu of the Babylonian Chronicle. Since there must have been two Neo-Elamite kings with the name Hallutuš-Inšušinak (Tavernier 2014), the legal text can now be attributed to the early 6th century reign of Hallutuš-Inšušinak II. After Hallutuš-Inšušinak I, the Annals of Sennacherib (705–681) (RINAP 3.1, 22 v 14–16) assign the Elamite throne successively to his sons Kutur-Nahhunte (693–692) and Huban-menanu (692–688), the latter ascending the throne after his brother was taken prisoner in a rebellion and killed (ABC 1, iii 13'–14'). In 691 under his command, a coalition of Elamite and Babylonian military forces fought the battle of Halule against the Assyrians.

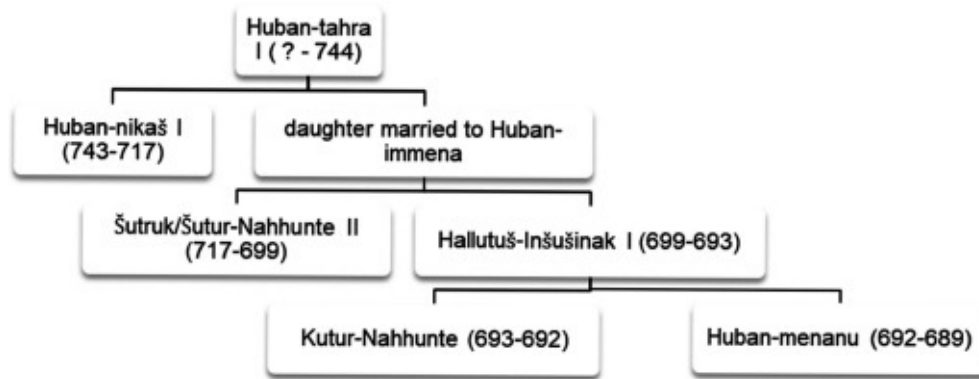
Vallat (*apud* Steve, Vallat and Gasche 2002/2003: 470–471) collected the kings from Huban-nikaš I to Tammaritu together under a single dynastic name: the Hubanids. Since the textual sources are silent on the kinship between Huban-menanu and his successor Huban-haltaš I, however, their family ties cannot be proven (Gorris 2014: 73–79; contra Waters 2006: 499). Furthermore, on the relevant Babylonian Chronicle tablet (ABC 1, iii 27–31) a line indicating a new chapter marks a clear distinction between the two kings, suggesting that after a decennium of court intrigues it was Huban-haltaš I who founded the Hubanid dynasty.

The second Neo-Elamite dynasty: the Hubanids

Very little is known about the first two Hubanid kings except for their regnal years which are reported in the Mesopotamian sources. Huban-haltaš I (688–681) remained in power for eight years before dying from a stroke. Although the crucial passage in the Babylonian Chronicle is damaged (ABC 1, iii 30'–33'), he and his successor Huban-haltaš II (681–675) were most likely related to each other in a lineage of first degree. If the missing sign in the text is to be read as the logogram DUMU 'son' (CM, 183; Gorris 2014: 74–76; contra Waters 2006: 499), then Huban-haltaš I had at least three sons: Huban-haltaš II, Urtak and Tepti-Huban-Inšušinak. During Huban-haltaš II's reign, Babylonia would become an unstable factor in the Assyrian Empire due to his ongoing involvement in the Sealand region, his attack on Sippar in 675 and his support to southern Mesopotamian tribes. In combination, the Babylonian problems inflicted by the Elamites and the sudden unexpected death of Huban-haltaš II (ABC 1, iv 11'; ABC 14, 16–17) may have prompted Esarhaddon to convince Urtak to commit a *coup d'état* against his own nephews Kutur-Nahhunte (Kudurru) and Paru, the two sons of Huban-haltaš II (BIWA 97b iv 81).

For a few years after the accession of the Assyrian king Assurbanipal (669–627), Urtak

(675–664) would uphold a pro-Assyrian policy (ABC 1, iv 17–18; RINAP 4, 1 v 26–33a; Frame 1992: 83 n. 99). But in 664, presumably under influence of Elamite court officials, including his younger brother Tepti-Huban-Inšušinak, he conducted an invasion of Babylonia, only to be forced into retreat by the Assyrian army. Even though his eldest son Huban-nikaš was actively involved in foreign Elamite politics, after Urtak's death the same year Tepti-Huban-Inšušinak I (664–653) ascended the throne (SAA 10, 341).



[Figure 13.1 The First Neo-Elamite Dynasty.](#)

With Tepti-Huban-Inšušinak I, an anti-Assyrian faction came into power. The Elamite king Teumman who now enters the Assyrian sources was previously connected by scholars to the Elamite inscriptions of a Tepti-Huban-Inšušinak (EKI 79–85; IRS 59–62), but François Vallat (1996: 393) and Jan Tavernier (2004: 33–39) have persuasively argued on linguistic and orthographic grounds that these inscriptions should be dated to the Neo-Elamite III period. Hence, the Teumman of the Assyrian sources will hereafter be designated as Tepti-Huban-Inšušinak I and the later Elamite king as Tepti-Huban-Inšušinak II. During the battle of Til-Tuba in 653 Tepti-Huban-Inšušinak I and his eldest son Tammāritu were taken captive and decapitated (BIWA 300). Amongst the Elamite captives of Til-Tuba, there is possibly a first reference to Šutruk/Šutur-Nahhunte (Ištarnandi), the king of Hidalu (*-653), which is generally assumed to be the highland capital of the Neo-Elamite kingdom (BIWA B vi 49–51; BIWA 306). Although there is no conclusive evidence that Šutruk/Šutur-Nahhunte was a member of the extended Hubanid family (Fuchs 2003: 135), we might assume that he was a ruler from the same generation as the brotherhood of Huban-haltaš II, Urtak and Tepti-Huban-Inšušinak I. The nature of the kingship of Hidalu remains a subject of scholarly debate; it is difficult to say whether it should be understood as a governorship (Henkelman 2003b: 254–255; 2008: 12–13; Fuchs 2003: 135), a semi-autonomous political status (Potts 2010: 123) or an independent kingdom (BIWA F iv 57–58).

Following the battle of Til-Tuba, Assurbanipal installed the sibling kings Huban-nikaš II (653–652/1) and Tammāritu (653-*), sons of Urtak, on the thrones of Elam and Hidalu, respectively (BIWA B vi 85–86). It was probably the Assyrian succession model that he

imposed on these Elamite client kings (SAA 3, 31; contra Waters 2000: 56; Henkelman 2012: 432) who had been sheltering in his court against the wrath of their uncle Teumman for the ten years prior (Potts 2016: 269–270). Huban-nikaš II, however, quickly turned against Assyria, providing military support to Assurbanipal's rebellious brother Šamaš-šum-ukin in the battle of Mangisu (652/1) (BIWA F iii 6–9, C vii 128–129). The alliance was defeated.

The anti-Assyrian Tepti-Huban-Inšušinak I branch now regained power with Tammaritu (652/1–650), not to be confused with the ruler of Hidalu (BIWA A iv 1–2; Frame 1992: 183). This Tammaritu's father, Huban-haltaš, was a son of Tepti-Huban-Inšušinak I (BIWA F iii 21–26; B vii 58–63) and had lived with his family in exile in the Elamite frontier fortress Bit-Imbi (BIWA F iii 57–61) (for a discussion on Tammaritu's descent, see Gorris 2014: 92–99). Tammaritu was soon dethroned after an internal revolt (BIWA A vi 11; F iii 19–20) and escaped with the royal family to Assyria where he was granted asylum by Assurbanipal (BIWA 315; de Vaan 1995: 252).

The Elamite rebel kings (650–645 BCE)

During the five years following the reign of Tammaritu, Elamite internal politics escalated in a struggle for power between pro- and anti-Assyrian political and military factions. Assurbanipal took advantage of the internal impasse to strengthen his own influence in Elam. Indapipi (650/649–648), a servant of Tammaritu (BIWA 42, 110), came into power after a *coup d'état* (BIWA B vii 54–78). But his refusal to extradite Nabu-bel-šumati, the rebellious prince of Sealand, caused Indapipi's pro-Assyrian policy (Waters 2000: 66) and his reign to come to an end (BIWA C ix 83).

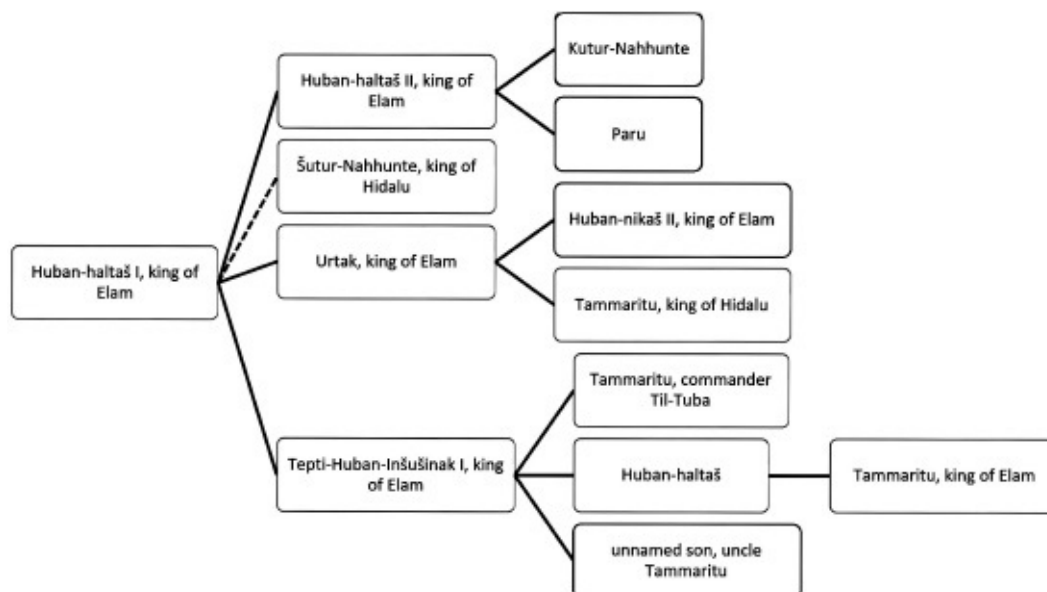


Figure 13.2 The Hubanid dynasty.

The reign of Huban-haltaš III (648–645), a member of the Elamite military elite (Waters 2000: 69), was repeatedly interrupted by internal Elamite uprisings and Assyrian military campaigns against Elam. When he abandoned his capital, Madaktu, in the face of the approaching Assyrian army, Huban-habua (647), the local ruler of Pupilu, temporarily seized power in the Susiana region (Waters 2000: 71; contra Fuchs 2003: 133). Soon afterwards, however, the Assyrian army reinstalled the Hubanid Tammaritu (647), who had received asylum in Assyria after his dethronement, as king of Elam (BIWA A v 21–22). After Tammaritu's rebellion against his Assyrian overlord (BIWA F iii 72–74; ABL 1311+), Huban-haltaš III, who had been hiding in his mountain stronghold, reclaimed the throne. His second tenure of office was overshadowed by the second Assyrian military campaign (BIWA F iv 17–18), which led to the battle at Dur-Untaš (BIWA F iv 29–66) and the sack of Susa in 646.

After the sack of Susa, another short-lived Elamite ruler named Pa'e arose (BIWA A vii 51–57), but shortly thereafter Huban-haltaš III recaptured the Elamite throne (BIWA A vii 9–15) for a third tenure (646–645). His continued rejection of Assurbanipal's demands to give up Nabu-bel-šumati (BIWA A x 6–7) induced one of his servants, perhaps the local ruler Huban-nikaš, son of Amedirra (de Vaan 1995: 240–241; contra Waters 2000: 73), to start a rebellion against him and he was taken alive by Assurbanipal in his mountain stronghold, Murubisi (BIWA A x 8–16). After his capture Elam was left destabilized but certainly not desolated as the Assyrians claimed. In any case, Mesopotamian sources now fall silent on Neo-Elamite royal power.

The Elamite kings after the sack of Susa (645–520 BCE)

While the Mesopotamian sources for the NE II period focused mainly on the royal authority of the Elamite kings in Susa (and Madaktu), the Elamite sources available for the NE III period give a better insight into Elamite state structure and royal power. In contrast to the Mesopotamian sources which present the Neo-Elamite kingdom as a centralized entity comparable with the Neo-Assyrian state structure (Waters 2000: 107; Fuchs 2003: 129), the late Neo-Elamite texts reveal a strong network of local rulers, especially in the border regions, who were bound by loyalty to the king of Anshan and Susa. This decentralized government does not signal the fragmentation of a once-unified Neo-Elamite kingdom (Henkelman 2008: 12–17) but rather represents an efficient system to bind together the various regions (highland-lowland) and tribal entities (Gorris 2014: 302–314).

The late Elamite kings at Susa

The oldest Elamite inscriptions of the NE III period – the Kul-e Farah I rock relief inscription (EKI 75) of Hanne, *kutur* of Ayapir, a cornelian bead (Vallat 2011), a gold “ring” from a tomb

near Ram Hormuz (discussed below) and the so-called Jerusalem cylinder seal (Amiet 1973: n. 34) – are attributed to the reign of Šutur-Nahhunte. Tavernier (2004: 20–21) connected Šutur-Nahhunte to the Jerusalem seal, making him the son of Indada and father of Huban-kitin. If Indada had been a king, then Tavernier’s proposed regnal date for Šutur-Nahhunte between 635 and 610 would be highly plausible, and Indada could bridge the gap with the last Neo-Elamite king, Huban-haltāš III, found in the Assyrian sources. As a consequence, Šutur-Nahhunte was probably the Elamite king who received the Elamite cult statues from Uruk returned by Nabopolassar II in 626 (ABC 2).

The second Hallutuš-Inšušinak (c. 598/93–583/78) must have brought considerable stability to the Elamite kingdom. The Babylonian adoption contract dated to the 15th year of his lengthy reign (Weisberg 2003: 1; Tavernier 2014) was probably written around 589–578, given its archaeological context and its relation to the Iqīša archive, meaning that the beginning of his reign aligns with the early Iqīša contracts dated between 598 and 593 (Gorris 2014: 136–142). Vallat (1996: 290, 393; 2002) and Tavernier (2004: 39) appropriately attributed a late NE IIIB date to the 15 Elamite inscribed bricks (EKI 77; IRS 58) and the wall knob (MDP 53 50–51 Pl. 9:6) of Hallutuš-Inšušinak II, since he must have ruled for several years before concluding his restoration works on the Inšušinak temple.

The Ururu bronze plaque, a charter ordered in service of king Huban-Šuturuk, son of Šatihupiti, the paramount ruler of Elam at Susa (Basello 2013: 258; contra Henkelman 2003b: 258; 2008: 315), dates to the early 6th century according to the glyptic style of its engraved pseudo-sealing (Amiet 1973: 10–11, n. 28). If Huban-Šuturuk was the paramount ruler granting privileges to the principal person in the plaque’s text, Ururu, and the other Gisatians, then Ururu must have been the local ruler of Gisat, an important cultic centre in the Elamite highlands (Henkelman 2008: 314–315, n. 729).

King Atta-hamiti-Inšušinak, son of Hutran-Tepti, not to be confused with Attametu of the Assyrian sources (Stolper 1992a: 199), can be dated to the first half of the 6th century based on the orthographic and paleographic features of an inscribed stele he left behind at Susa (EKI 86–89). This regent adopts the traditional Middle Elamite title “King of Anshan and Susa” and refers to his military deeds against two cities Šamaršusu and Pessitme (EKI 86:12, 15). Gisat and Huhnur, two highland locations in the vicinity of the Elamite stronghold Hidalu, are also prominent in the text (EKI 88:4). Since these military campaigns were intended to (re)gain the loyalty of the highland lords, one could assume that his reign predates the Teispid dynasty, that is, 2nd quarter 6th century, excluding an identification with the late Elamite rebel king Aθamaita (Gorris 2014: 154–155; contra Waters 2000: 85; Tavernier 2004: 24–30).

The activities of Tepti-Huban-Inšušinak II, son of Šilhak-Inšušinak, are known to us through several inscribed bricks (EKI 80–84; IRS 59–62) and steles (EKI 79; EKI 85): he built a wooden portico (EKI 79) on the Inšušinak temple (EKI 82–84; IRS 59–62), constructed the Pinigir temple, held a cultic feast in the groves (EKI 85) and conducted military campaigns against the

Balahute and Lallari people (EKI 80; IRS 62) in southern Luristan (Vallat 1993: 33). Within a relative dating of the late Neo-Elamite royal inscriptions, these texts should be clustered with the Atta-hamiti-Inshushinak stele. Vallat (1996: 391–394) and Tavernier (2004: 27, 39) placed the reign of Tepti-Huban-Inšušinak II around 550–530, which would make him a vassal king of the Teispid king Cyrus II the Great.

The listing of three Elamite revolts (522–520) in Darius I's Bisitun inscription suggests that Elam, or at least the Elamite lowland, was not yet under complete Achaemenid domination before his reign (Henkelman 2003b: 262). After the highland revolt of Haššina (DBe, p I:16) and Martiya (DB II.23) the Elamite Atta-hamiti-Inšušinak (*Aḫamaita* in Old Persian), who probably assumed the royal name of the last great Neo-Elamite king Atta-hamiti-Inšušinak to enforce his claim on the Elamite crown, marched against Darius (DBp v: 71). Upon his defeat Elam was incorporated into the Achaemenid Empire.

Local rulers of the Neo-Elamite period

The above-mentioned rulers of Ayapir, Gisat and Hidalu attest to a decentralized government system for the Elamite highlands. For the political situation in the lowlands, abundant information is provided by the Susa Acropole archive, which documents a Susa-based administrative network managing various goods (tools, weapons and textiles) for a short period in the late 7th to early 6th century (MDP 9; Basello and Giovinazzo Chapter 24 this volume). Vallat's (1996: 389, 393) hypothesis that *sunki* (Elamite "king") Ummanunu was paramount ruler of Elam during the era of these texts is rather doubtful, because the particular text (MDP 9 165) in which he appears is related to the Zari people (MDP 9 158; MDP 11 305), has a Babylonian character (Basello 2011: 74–75) and has no geographical reference to Susa (Gorris 2014: 131). Ummanunu was therefore presumably a local ruler under the authority of Hallutuš-Inšušinak or the Elamite king predating his reign (Gorris 2014: 128–132). If Vallat's (1996: 389, 393; contra EKI, 169 n. 15) identification of Ummanunu, Šilhak-Inšušinak's father, with the Ummanunu of the Acropole texts (i.e. end of the 7th century; MDP 9 165) is accepted, then Šilhak-Inšušinak must also have been a local king (Gorris 2014: 134–135). His votive inscription on a door socket (EKI 78) to DIL.BAT, a goddess venerated at the outskirts of the Neo-Elamite kingdom rather than in Susa, seems to prove this hypothesis.

The administrators of the Acropole archive referred to numerous kings, indicated with the logogram EŠŠANA/LUGÁL "king", in the Susiana region close to the Mesopotamian border (Potts 2010: 115). Neo-Assyrian letters indicating the position of these Elamite borderland rulers do not use the logogram EŠŠANA/LUGÁL, but refer to the "land of the sheikhs" (de Vaan 1995: 311–317) or "sheikhs of the king of Elam" (SAA 17 154). Since several sheikhs of the Zari people with Semitic names (Appalaya, Nabu-našir, Marduk) are mentioned in the Acropole texts (MDP 9 80, 82, 178), we can assume that this tribal group incorporated in the

Susa administrative system, possibly of Aramean origin (Henkelman 2003a: 213 n. 114; 2003b: 257), was dwelling in the Elamite-Babylonian border region.

Rulers of the Samatian people with mixed Elamite-Iranian anthroponyms were also attested in the Acropole texts (Gorris 2014: 193). Since inscriptions on objects among the “Kalmakarra hoard” reported to have come from a cave in southern Luristan refer to several Samatian *sunkis*, we can locate this tribal group in the Zagros foothills at the northern outskirts of the Elamite kingdom (but note the problems with some of the material attributed to this hoard in Henkelman 2003a).

Living in one of the lowland districts from the reign of Šutruk-Nahhunte II were the people of Zamin (EKI 74), an Elamite region (Nin 5) most likely located in the Tupliaš area near the Babylonian border (SAA 17 152:5; Gorris 2017: n. 6). The ruler of Zamin (Nin 1; 10; 14; Gorris 2013; MDP 9 88) was a sheikh Bahuri (Nin 25:5, 11; MDP 9 281; Steve, Vallat and Gasche 2002/2003: 481) who commissioned the Elamite Nineveh letters (c. 630–620). In one letter (Nin 13:1–5), Bahuri forwards messages of the sheikh of Hara(n), probably an Elamite fortress in the Araši region connected by road to Zamin and Susa (Gorris 2017).

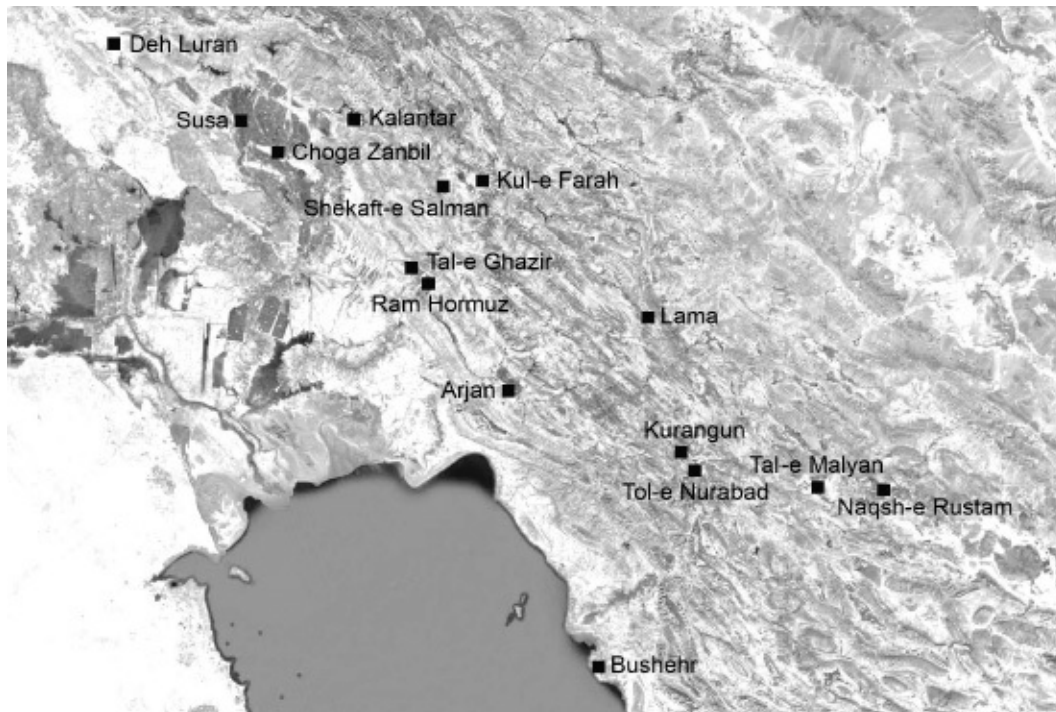
Neo-Elamite material remains

A brief journey around the archaeological vestiges of the Neo-Elamite world now takes us from the lowland plain of Deh Luran onto the large tell of Susa in Susiana and then into the Zagros foothills and onto Malyan in the more isolated highlands to the east (locations indicated in Figure 13.3). Ceramics with Neo-Elamite comparisons have also been found around Tol-e Peytul (ancient Liyan) on the marshy coast to the southwest near Bushehr where a second-millennium Elamite presence is already recognised (Carter et al. 2006: 89–94; Potts 2016: 15), but these finds and their significance require further study. With the exception of the few inscribed objects noted above, it is almost impossible to match the people and events found in textual sources with the material evidence from the various sites with attested Neo-Elamite presence, or even to locate the mentioned toponyms on the ground. The discussion, therefore, proceeds quite independently from the historical outline, following de Miroschedji’s bipartite NE I/NE II division established through excavations at Susa.

The lowlands

Traditionally a key location along an important foothill route linking Susa with the Diyala and Upper Mesopotamia, Deh Luran has no attested settlement at the outset of the first millennium but appears to have been (re-)established shortly thereafter (Wright and Neely 2010: 114). Although excavations have yet to be undertaken in the area, ample Neo-Elamite sherds have been collected particularly around Tepe Patak, ‘Ain Kosh and Gārān (Carter and

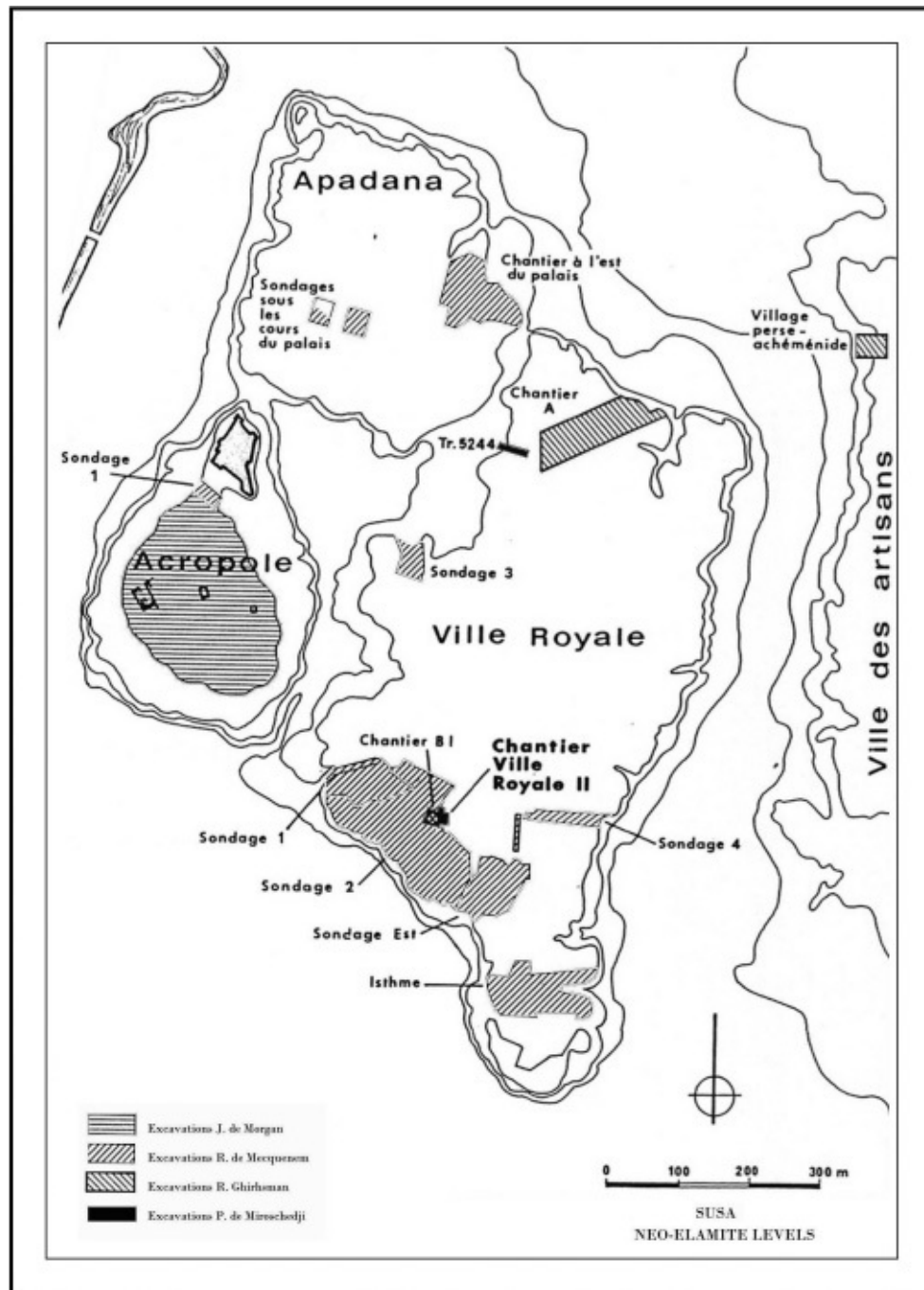
Wright 2010: 15). These three sites are regularly distributed from east to west approximately 16–17 km apart, pointing to a transport route along the northeastern slopes of the plain (Wright 2010: 91).



[Figure 13.3 Map indicating main sites mentioned in text \(Google Earth 2016\).](#)

Progressing south onto the Susiana plain, surveys have identified 20 sites with indications of NE I habitation and six with NE II (de Miroschedji 1981c: 170–171, Figs. 55–58). An intensification of settlement on the southeastern side, east of the Dez river, along the road to Ram Hormuz suggests Susiana’s inhabitants were deserting the more exposed parts of the plain (Carter 2007: 143–144, 146). Despite its vacillating fortunes, the lowland Elamite capital of Susa continued to be inhabited throughout this period. Comprised of four mounds – the Acropole, Apadana, Ville Royale and Ville des Artisans – its imposing tell was the focus of large-scale excavations by the French archaeological delegation from the late 19th century (see [Figure 13.4](#)). In the early years of investigation, Jacques de Morgan reached Neo-Elamite layers on the Acropole in his trenches 7, 8, 13 and 15–18 (de Miroschedji 1978: 213), where he yielded the fragments of two inscribed steles dating to Šutruk-Nahhunte II’s reign, the famed bitumen relief depicting a seated elite woman spinning thread, and the fragments of Atta-Hamiti-Inšušinak II’s inscribed stele depicting the elaborately costumed regent seated before another elite individual (recently identified as an Elamite lord; see Gorris 2014: 156). This mound had long served as the cultic hub of Susa and its continued religious importance is signalled by a rare Neo-Elamite architectural find: a square, single-room temple on its southeast side housing an “altar” decorated with griffins, horses, lions, winged scorpions and vegetal motifs (Amiet 1966: 505, 518–522). Associated inscribed glazed bricks suggest its

dedication by Šutruk-Nahhunte II and Hallutuš-Inšušinak II to the principal Susian deity Inšušinak (Steve 1987: 50, n. 154). Nearby, the Acropole texts were found in what was evidently a Neo-Elamite building (Álvarez-Mon 2010: 198, Pl. 100).



[Figure 13.4 Plan of tell of Susa indicating excavation areas \(from de Miroschedji 1978: Figure 48\).](#)

During 1912–1939, Roland de Mecquenem took over excavations at Susa and shifted the primary focus to the Apadana and Ville Royale, which both produced substantial Neo-Elamite mortuary remains. In the Apadana, he opened three trenches: a large cut to the east of Darius’ palace on the border of the Ville Royale where he believed he was excavating a “*nécropole élamite*” and cuts underneath its central and west courts. In the southwest of the Ville Royale,

he worked in two trenches, Sondage 1 and Sondage 2, where most of the Neo-Elamite material again derived from pit burials and mud-brick vaults. Among the significant non-funerary finds were a group of seven “Apadana texts” (MDP 11 301–307), mostly promissory notes for silver and gold, contemporaneous with the Acropole corpus (Stolper 1992b: 267–268). Architecturally speaking, de Mecquenem’s only recorded Neo-Elamite finds in the Apadana and Ville Royale were the numerous baked and unbaked mud-brick vaulted tombs, often preceded by an antechamber (e.g. Figure 13.5) (for a more detailed outline of de Mecquenem’s Neo-Elamite finds in these tells see Wicks 2017).

Working later in the north of the Ville Royale in his Chantier A, Roman Ghirshman encountered further Neo-Elamite mortuary remains, mostly pit graves, in levels X and IX (Steve, Vallat and Gasche 2002/2003: 470; for the problems of dating these levels see Mofidi-Nasrabadi 2013: 29–38). A second cut in the south, Chantier B, revealed remnants of Neo-Elamite or early Achaemenid constructions, and in level I of the Village Perse-Achéménide on the west border of the Ville des Artisans, part of a multi-roomed building containing three late Neo-Elamite texts was excavated (de Miroschedji 1978: 215; Potts 2016: 295, with refs).

In both the Apadana and Ville Royale, de Mecquenem recognised two discrete Neo-Elamite levels essentially corresponding to the NE I and NE II. The earlier he labelled “*époque d*”, “*l’élamite supérieur*”, “*Suse-Élam III*” or “*la couche à grès cérame*” for its profusion of glazed frit. The more recent, which produced an abundance of material, he variously designated as “*époque e*”, “*époque néo-babylonienne*”, “*la fin de l’Élam*”, “*décadence élamite*” and “*pre-achéménide*” (see especially his annual reports available online at www.mom.fr/mecquenem/index/rapports). These levels were further clarified by de Miroschedji during his 1975–1978 work in the southeast of the Ville Royale (VR II), where he established a Neo-Elamite ceramic sequence, and in his Apadana-VR trenches 2351 and 2384, and VR-Apadana trench 5244.

In the VR II de Miroschedji (1978: 213–215; 1981a: 37–39) defined two NE I levels, 9–8, consisting of isolated architectural remains and a few burials with material corresponding to de Mecquenem’s earlier *époque d* and certain finds from Ghirshman’s VR A levels IX and X. Most characteristic of these layers was a fine, moulded-wall goblet and, albeit encountered with increasing rarity, the tall “Elamite beaker” typical of the preceding level 10, dated c. 11th–10th century (Figure 13.5) (de Miroschedji 1981a: 21, 37). De Miroschedji (1978: 225; 1981a: 19, 23, 37–38) noted a trend towards coarser ceramics and a rarity of metal and stone objects, and like de Mecquenem witnessed a proliferation of bowls, pyxides, small bottles and other objects in frit, often glazed white, blue or green (e.g. Figure 13.5); a stark contrast with the marked decline in frit production elsewhere in the Near East during the 1st millennium (Heim 1992: 203). Level 8 yielded the earliest stratified glazed vessels made of baked clay (de Miroschedji 1981a: 20), corresponding with de Mecquenem’s (1924: 112–113) observation that glazed frit was typical of *époque d* and glazed baked clay of *époque e*.

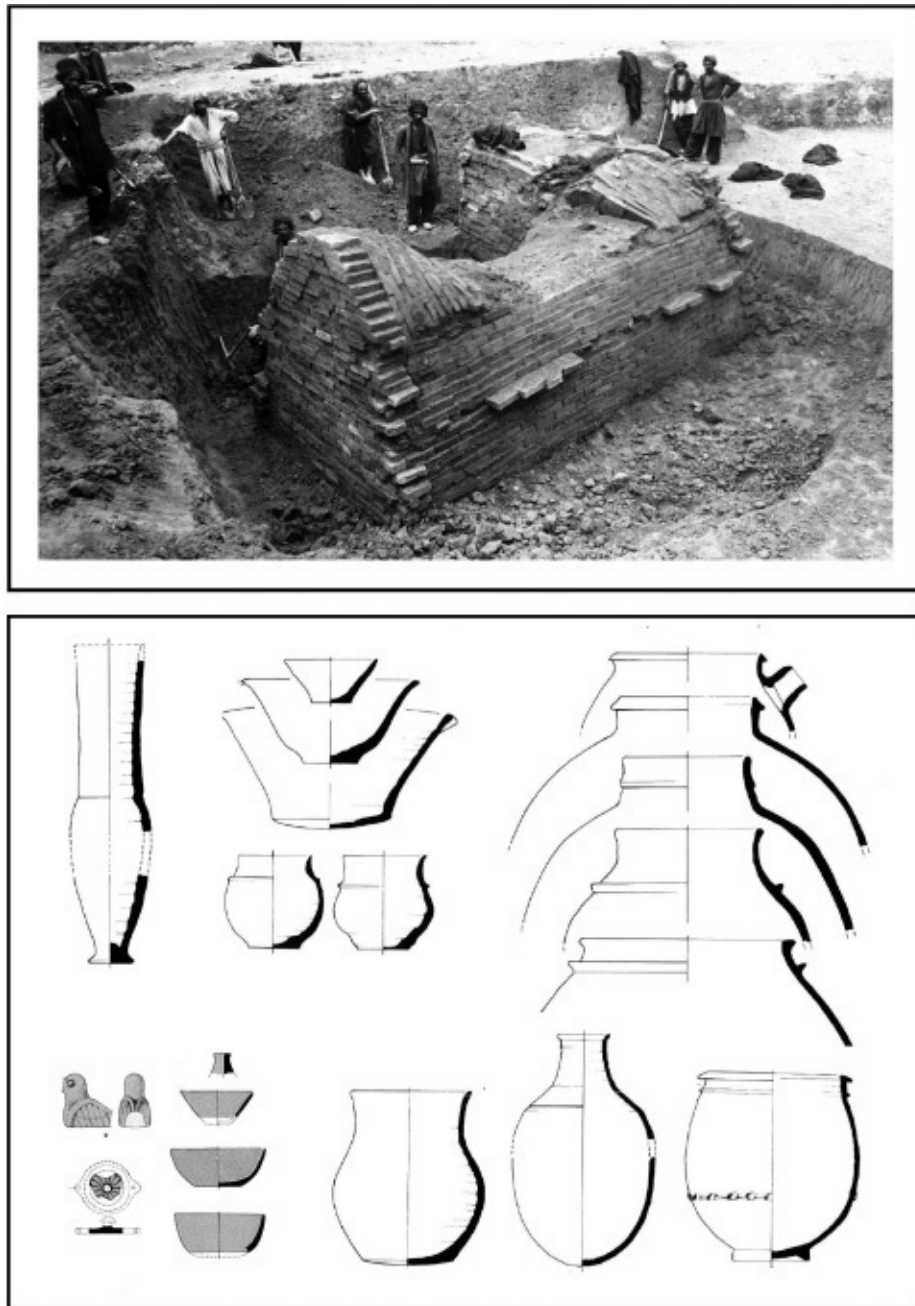
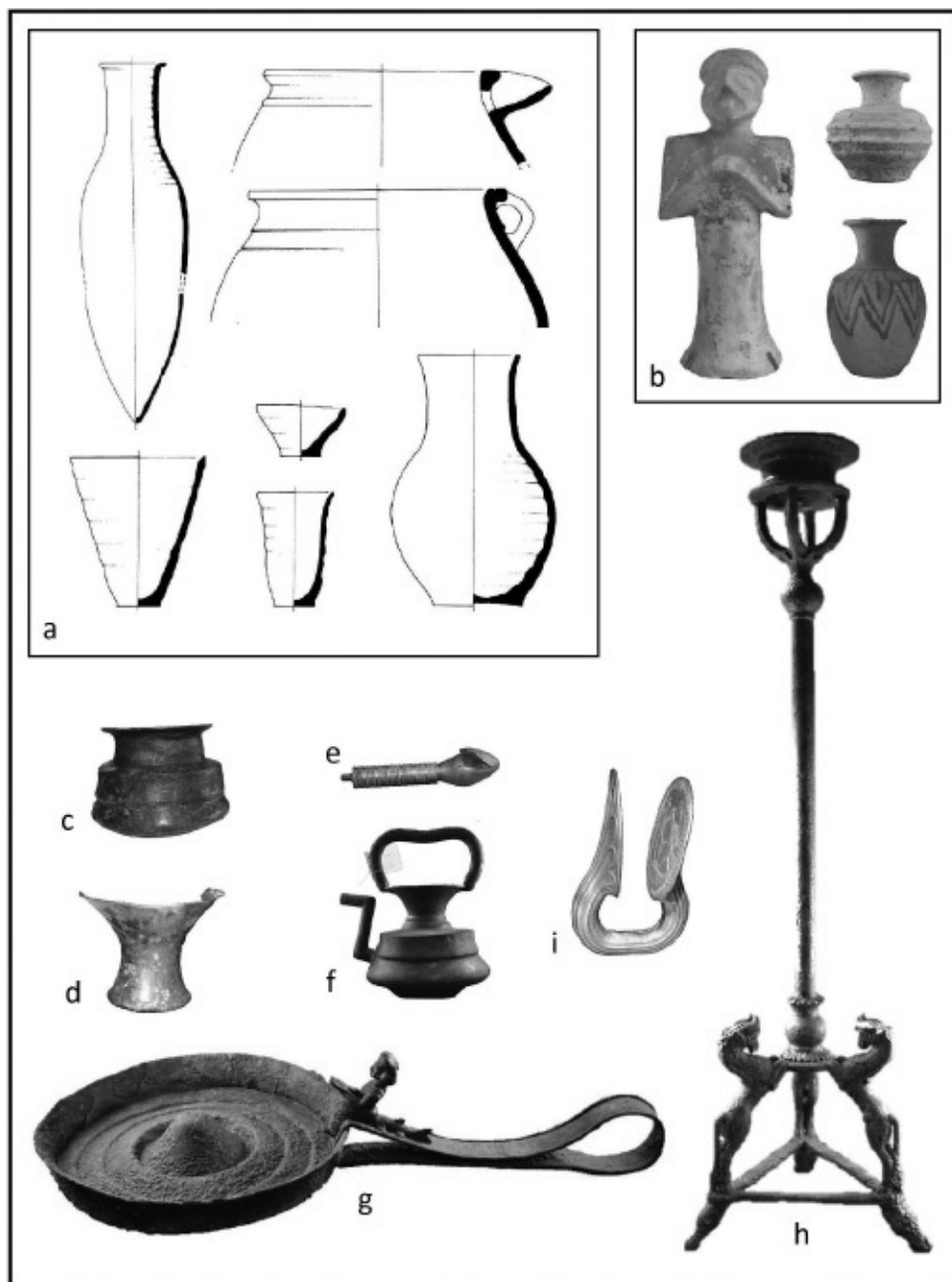


Figure 13.5 Top: Vaulted mud-brick tomb in the Apadana cut to the east of Darius' palace at Susa (from the archives of R. de Mecquenem www.mom.fr/mecquenem/index/photos, accessed 15 Sept 2015); bottom: characteristic NE I material (line drawings of NE I ceramics after de Miroschedji 1978: Figure 52–53; drawings of objects in frit after de Miroschedji 1981a: Figure 27; objects not to scale).

The next two VR II levels, 7–6, belonged to the NE II and contained some structural remains and burials with assemblages comparable with those of de Mecquenem's *époque e* (de Miroschedji 1978: 215), which were typified by various silex and iron objects, large pointed-base amphorae (Figure 13.6a) and small glazed baked clay objects (e.g. Figure 13.6b) (de Mecquenem 1924: 112–113; de Miroschedji 1981a: 29). Contemporary material was found also in the VR-Apadana trench 5244, VR A and Village Perse-Achéménide level I (de Miroschedji

1981a: 38). Levels 7–6 saw the return of metal vessels, including the distinctive carinated “inkwell” familiar from Luristan Iron Age III (c. 800/750–650) cemeteries ([Figure 13.6c](#)) (Wicks forthcoming a) and the bronze “chalice” with outwards flaring walls ([Figure 13.6d](#)). Another novel metal product was the iron-stemmed clothing pin with precious metal-covered bitumen head ([Figure 13.6e](#)) (de Miroschedji 1990). The pronounced changes in NE II material coupled with “disjunctions in stratigraphy” signal a disruption between the NE I and II phases (Carter 1994: 73), but from now until the reign of Darius, a continuity in material culture attests to the city’s quick recovery after 646 (Henkelman 2003b: 253). More than merely surviving, Susa evidently thrived during these late years of Elamite history with religious institutions, administrative systems and artistic traditions that would be inherited by the Persian Empire (see Álvarez Mon and Henkelman in Part VIII of this volume).



[Figure 13.6 Characteristic NE II material \[a\] ceramics \(line drawings after de Miroschedji 1978: Figure 54\); \[b\] glazed vessels and figurine from Susa and \[c\] “inkwell” from Susa \(photographs Y. Wicks, courtesy of the Louvre Museum\); \[e, f, g, h\] metal objects from Jubaji and \[d, i\] metal objects from Arjan \(photographs J. Álvarez-Mon, courtesy of the National Museum of Iran; objects not to scale\).](#)

Barely 30 km to the southeast of Susa lay the Middle Elamite religious centre of Choga Zanbil, ancient Dur-Untaş, where Ghirshman (1966: 38, 91) recognised a Neo-Elamite presence especially in the Išmekarab temple, an assertion confirmed by ceramic comparisons with Susa and typical Neo-Elamite glazed frit objects (Álvarez-Mon 2013a: 460). More recently, in his areas B and C, Behzad Mofidi-Nasrabadi (2007: 45–46, 90–91) discerned two building layers, 2 and 1, dated c. 10th–9th century and 8th–7th century, respectively, as well as c. 9–8th century sherds in the debris of area A. He also emphasises that the inclusion of Dur-Untaş as a “royal city” in Assurbanipal’s enumeration of plundered towns is ample evidence of its continued importance into the 7th century (Mofidi-Nasrabadi 2013: 28).

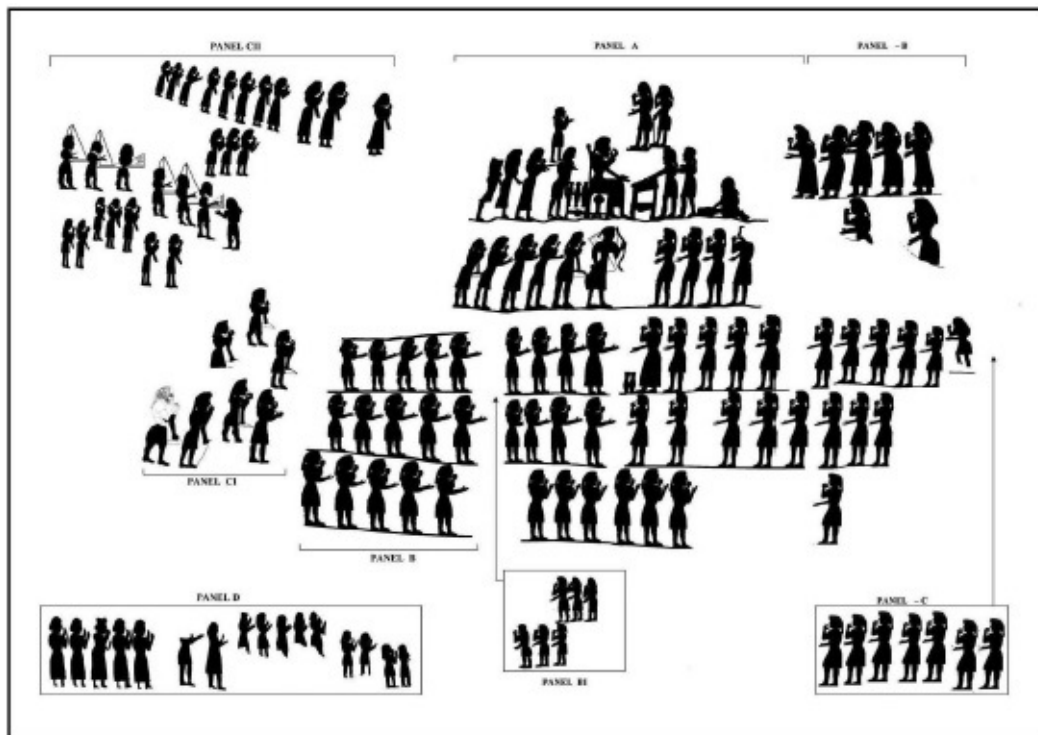
The foothills and highlands

Explorations further east into the Khuzestan foothill zones preferred as political bases during the period of confrontation with Assyrian kings (Stolper 1992a: 199) have produced limited but valuable evidence. A significant recent discovery around 70 km from Susa in the Upper Gotvand Dam catchment area is a settlement referred to as Kalantar 4, where rescue excavations uncovered residential architecture and two stone-lined tomb chambers yielding ceramics with comparisons in de Miroschedji’s Susa VR II levels 9–7 (Valipour et al. 2011).

Progressing southeast, tucked away in the Izeh-Malamir valley, are two remarkable outdoor sanctuaries, Kul-e Farah and Šekaft-e Salman, distinguished by their rock-carved reliefs. These sites were clearly singled out for special ritual use due to their natural features, especially water sources, and are believed to have been venues for the events shown on the reliefs themselves: ceremonies involving prayer, animal sacrifice, feasting and musical processions. Although no associated Neo-Elamite settlements have been detected in the Izeh-Malamir valley, the reliefs themselves attest to the ritual use and political exploitation of the area until the end of Elamite history (Álvarez-Mon 2013a: 465).

Six separate reliefs ranging probably from the 9th to 6th century in date are carved onto Kul-e Farah’s cliff faces (KFI, IV, V) and boulders (KFII, III, VI) (Álvarez-Mon forthcoming). Manufactured c. 9th–8th century and measuring 17.70 m wide × 6 m high, KF IV is both the earliest and most monumental, incorporating 141 individuals arranged around a large central figure (a king?) seated on a high-backed chair beside two tables laden with food and drink ([Figure 13.7](#)). Some of the more notable figures are attendants in long garments, a weapon-bearer and a conductor leading six harpists. The rest are uniformly represented with long,

braided hair and short garment, and all stand with their left hand outstretched and right hand holding a morsel of food (meat?) up to their mouth. The complex hierarchical structure of this ritual banquet is created through composition – the relative size of the individuals, their arrangement across multiple registers and their proximity to the central figure – and is further refined by costume, gesture and activities performed (Álvarez-Mon 2013b). A well-articulated hierarchy is also visible in the other reliefs, particularly the c. 8th–7th century KFIII boulder whose entire surface is covered with a procession of around 200 people. The ritual scenes on these and the remaining four reliefs, all dated c. 7th–6th century, variously depict animal sacrifice (KFIII, KfV, KfII, KfI), worship at a fire altar (KfV, KfI), music (KfI, KFIII, KfIV) and worshipping gestures (KfI-VI). Only KfI offers names for the people shown. The main figure, Hanne of Ayapir, stands with hands clasped at his waist, wearing long, braided hair and an elaborate garment bordered by rosettes and fringes. Behind him stand two smaller-scale figures, the weapon-bearing military general Šutruru and Hanne’s vizier and cupbearer Šutrurura (Potts 2016: 296). In the accompanying 24-line inscription (EKI 75), Hanne invokes several Elamite deities and introduces himself as son of Tahhi, the *kutur* (“leader/chief”) of Ayapir and vassal of king Šutur-Nahhunte, son of Indada. He dedicates the relief to Tirutir, probably gives an account of his military victories and various pious acts and finishes with a request for divine protection for the image and inscription and a curse against any potential vandals (Stolper 1987–1990: 277).



[Figure 13.7 Line drawing of Kul-e Farah IV \(from J. Álvarez-Mon 2013b: Figure 16\).](#)

At Šekaft-e Salman on a cliff face beside a cave, creek and waterfall which together served

as the ritual focus of the site, are another four reliefs bearing inscriptions by Hanne. Two (ŠSI-II) are earlier-dated 12th-century carvings depicting the Elamite royal family: on ŠSI two men, a boy and a woman stand in line before a fire-stand making various gestures of worship; ŠSII depicts the same group minus the lead male and fire-stand, and captions were added hundreds of years later to identify the boy and woman as Hanne's daughters Zāšeši and Ammatena. Inside the cave's mouth are another two reliefs (ŠSIII-IV) that both depict a single male individual and were probably carved in the Neo-Elamite period (Álvarez-Mon forthcoming). On ŠSIII there is an extensive text (EKI 76) comparable with that of KFI, but the main deity is instead Mašti "Mistress of Tarriša", perhaps the ancient name of Šekaft-e Salman. Amongst other activities, Hanne states that he intends to create images of himself and his wife and children (Stolper 1987–1990: 278).

Moving southwest, surveys in the corridor connecting Susiana to Ram Hormuz have detected only very limited Neo-Elamite evidence, with just two sites identified (Moghaddam and Miri 2007: 41). The Ram Hormuz plain itself, however, was an important Elamite population centre from c. 1350 through to 520 and home to two major Neo-Elamite occupations at Tepe Bormi and Tal-e Ghazir (Carter 1994: 68). Some scholars believe that the large Tepe Bormi mound, yet to be excavated, may be identifiable with ancient Huhnur (Mofidi-Nasrabadi 2005; contra Alizadeh 2014: fn. 84). Soundings at Tal-e Ghazir by David McCown in 1948–1949 produced some Neo-Elamite remains in level 1 of Mound B (Alizadeh 2014: 17) and a few burials in a "dump" area of the Fort Mound (Carter 1994: 70–71). Just 7 km to the northeast near Jubaji village lies an extensive archaeological zone comprising several hills scattered with Middle and Neo-Elamite ceramic sherds (Alizadeh 2014: 240). Evidence for the flourishing of this area late in our period is the tomb chamber found in 2007 on the Ala riverbank containing the above-mentioned "ring" inscribed "*Šutur-Nahhunte, son of Indada*". It housed two elite female burials in bronze "bathtub" coffins with assemblages that included typical NE II ceramics, glazed baked clay and metal vessels, as well as unique "inkwell" vessels converted into "teapots" ([Figure 13.6f](#)) and long-handled metal pans mounted with fish-woman figurines ([Figure 13.6g](#); and see Wicks forthcoming b). Other significant finds were several "candelabra" stands (e.g. [Figure 13.6h](#)), blade weapons, a multitude of stone vessels, a profusion of jewellery and clothing appliquéés, and remains of cotton fabric (Shishegar 2015).

Another tomb chamber housing a bronze "bathtub" coffin interment with an extraordinary assemblage comprised almost entirely of metal items was found in 1982 on the Marun riverbank slightly further south near ancient Arjan, a significant Sasanian settlement with archaeological remains going back into prehistory. Grave goods of a local Elamite origin comparable with the Jubaji finds were typical NE II chalices, a candelabrum and a gold "ring" ([Figure 13.6i](#)). Yet in contrast to the Jubaji metalwork, certain stylistic elements, even if they had evolved independently in Elam, reflect earlier contact with the Assyrian court. Four of the objects were engraved with the same inscription "*Kidin-hutran, son of Kurluš*", perhaps

naming the male interred in the coffin (Álvarez-Mon 2010). The hitherto unseen range and wealth of goods found here and in the Jubaji tomb supports the assertion that the centres of power had shifted into the more protected foothill zones in the later part of the period, enabling a remarkable Elamite resilience.

Further into the highlands, in the Beshar Valley in Kuhgiluyeh-Boirahmed province, a cemetery comprised of stone-lined, gabled-roof chambers dated late 2nd–early 1st millennium was detected in 1999 near the village of Lama. Middle Elamite ceramic parallels with Susa have been established for the earlier graves, while the later ones instead show Shogha and Teimuran influences (Jafari 2013). From these, it is difficult to determine whether the site remained within the Elamite sphere, but as noted for late 2nd millennium ceramics exhibiting a Mamasani-Kuhgiluyeh-Boirahmed corridor regionalism, ceramic styles could evolve locally and quite independently of (Elamite) political hegemony (Potts 2013: 132).

In Mamasani itself, an early 1st-millennium presence has been detected at eight sites during surveys in the Dasht-e Rostam-e Yek and Dasht-e Rostam-e Do valleys north of Nurabad, and excavations at Tol-e Spid and Tol-e Nurabad have both brought forth Neo-Elamite ceramics. The nature of habitation at these sites remains to be clarified (Potts et al. 2009: 156, 181), but the evidence at Nurabad in particular is promising. Work here yielded pottery comparable with lowland Neo-Elamite ceramics and thick walls of a building in Trench B (Phase B9), probably transitional Middle to Neo-Elamite in date, and another thick mud-brick wall directly over it belonging to a Neo-Elamite structure (Phases B8 and B7a-b) (Potts et al. 2009: 72).

Fars has otherwise produced little evidence for Neo-Elamite presence except at Tal-i Malyan, sector EDD, on the Marv-Dasht plain where early NE I occupation and three slightly later burials with handmade ceramic types unrelated to lowland types are documented (Carter 1996: 47). This large settlement's decline and abandonment in the early first millennium is usually seen in terms of a rather problematic model of increasing pastoral nomadism linked to migrant Iranian populations (Álvarez-Mon 2013a: 470, with refs). Malyan is recognised as the ancient city of Anshan, the traditional Elamite seat of power named together with lowland Susa in the royal titular “king of Anshan and Susa”. Its importance in the Elamite psyche over the *longue durée* as both a place and concept is witnessed in the continued employment of this royal title after the tell's abandonment (Álvarez-Mon, Garrison and Stronach 2011: 13).

Two important additional pieces of evidence indicate that highland Fars had remained within the Neo-Elamite sphere. At the open-air sanctuary of Naqsh-e Rostam, later an Achaemenid royal burial site, a Neo-Elamite royal (?) male and a crowned female were added to a 17th century relief. Likewise at Kurangun a series of Neo-Elamite style worshippers were added to an older relief of approximately the same date. Both additions point to a continuity in religious tradition and political authority in the area down into the first millennium (Potts et al. 2009: 12; Álvarez-Mon 2013a: 469–470).

Neo-Elamite culture and society

Our understanding of Neo-Elamite culture and society remains rather modest, particularly for the large segment of the population represented by the common people. We know little about, for example, precisely where and how they lived, worshipped, worked and ate, the myths they told, or how childhood and gender roles were conceived. At best, in view of the tribal groups occupying Elam's permeable territorial fringes and the significant Iranian presence documented in later textual sources, we can be assured of this society's diversity. A progressive Iranian-Elamite acculturation undoubtedly contributed to the evolving face of southwest Iran throughout the Neo-Elamite period and has attracted much scholarly interest in recent years (e.g. see Tavernier, Chapter 9 in this volume), but pinpointing the visible changes in the archaeological record that reflect this interaction, and likewise relations with border groups, remains an avenue for future research. Also demanding consideration is the close contact of the Elamite royal families with their elite counterparts in southern Babylonia, including at least two attested intermarriages (Henkelman 2008: 36, with refs), and with the Assyrian court.

Our best iconographic evidence for Neo-Elamite society is offered by the Izeh-Malamir reliefs with their highly politicised depictions of sometimes large numbers of people gathered in the presence of the gods for a ritual event to reinforce loyalty to a single, central individual. Perhaps the product of a complex political system relying on a network of loyalties, the socio-political hierarchy still emblazoned today across the rocky faces of Kul-e Farah was a highly articulated one. Participants were carefully positioned and painstakingly detailed with variations in garment, headdress, hair, adornment, props, gesture and roles played, all of which undoubtedly intersected to designate the multiplicity of ranks, titles and positions documented for the Neo-Elamite court, military, religious and civilian hierarchy (as outlined by Henkelman 2008: 20–28). Much remains to be achieved in the field of Elamite social history, but Hanne's inscriptions, even if by and large poorly understood, offer fascinating glimpses into the importance assigned to women and children, or at least the royal family unit, in public political life.

These open-air pilgrimage sites, together with the sanctuaries at Kurangun and Naqsh-e Rostam, also provide our most compelling evidence for Neo-Elamite cultic practice. The depicted fire altars, animal slaughter and worshipping gestures seem to represent an adaptation by the ruling class of urban-based temple rituals into a natural setting (Álvarez-Mon 2014: 26). Their objective may have been to gather tribal (agro-)pastoralist groups occupying areas outside the major centres and in border areas of Khuzistan's west, north and east to reinforce their relations with the king (Henkelman 2003b: 258–259; 2011: 128–133). Evidence for places of worship in the urban centres is fairly circumscribed, comprising only the square temple on Susa's Acropole and scattered bricks inscribed by Neo-Elamite kings

claiming to have built or restored temples to various gods (IRS 59–62). The religious city of Choga Zanbil also reveals evidence for Neo-Elamite occupancy, but little can be said of cultic practices here at this time.

As diverse as Neo-Elamite society was the pantheon of its gods. An Elamizing trend commencing in the second millennium continued during our period with the addition of many previously unknown gods, including Hanne's Mašti, to the principal divinities Inšušinak, Napiriša, Lagamal, Pinigir, Nahhunte and particularly Huban who we have already witnessed in many royal names (Vallat 1998). This diversity is accompanied by a rich mythological and religious visual repertoire preserved in the mediums of glazed frit and clay (Álvarez-Mon 2010: 237–261), late Neo-Elamite glyptic (Garrison, Chapter 32 in this volume) and metalwork from the Arjan and Jubaji tombs (Álvarez-Mon 2010; Shishegar 2015). Relations between Elamites and their divinities – especially the rulers who enjoyed their special protective *kitin* – are a major theme in the preserved monumental inscriptions. The longer texts on the steles and reliefs are generally poorly understood, but of particular interest is Tepti-Huban-Inšušinak II's stele (EKI 85) inscription, which allocates cattle and sheep/goats to various cultic officials, including a "high-priestess of the 'aside' temple of Huban" to be slaughtered for a ceremony in the *husa* ("grove"), a location regarded by some scholars as a burial site for the Elamite dead, particularly royalty (Henkelman 2008: 27, 441–452). In our period, the netherworld aspect of Inšušinak becomes particularly pronounced (Steve 1987: 51), but there is no confirmed association between his temples and burial sites.

Even though the vast majority of Elamite archaeological material was retrieved from mortuary contexts, Elamite funerary practices have failed to attract much scholarly attention. Except for a few isolated child cremations deposited in jars at Choga Zanbil, the Neo-Elamite lowland burials were either primary, multiple (consecutive) inhumations in vaulted mud-brick tombs or single inhumations in pits, jars or brick-lined pits. In the mountainous zones, the Elamite dead have been found interred in pits or stone-lined chambers. The Neo-Elamite use of coffins is so far isolated to Arjan and Jubaji, and these examples can be linked to a U-shaped bronze coffin of Assyrian origin found in funerary contexts at Nimrud and Ur (see Wicks 2015). In terms of burial location, the Arjan and Lama burials attest to extramural burial, but otherwise targeted archaeological excavations of tell sites have favoured the discovery of intramural burials. In these urban areas, the practice of residential (i.e. subfloor) interment is usually taken for granted, although this ignores the general inability of archaeologists to recognise direct connections between tombs or graves and the buildings above. To the contrary, evidence for non-residential burial as, for example, in the above-mentioned Tal-e Ghazir Fort Mound, has been more forthcoming (Wicks 2017).

The deceased were generally accompanied by a fairly standardised range of goods. They were sometimes adorned with jewellery and occasionally provided with weapons, but most common were vessels for serving and for short-term storage and pouring of liquids, both used

for provisioning food and perhaps other ritual acts such as libations. Further evidence for food offerings is provided by larger liquid and dry storage vessels found in tombs, animal bones (usually of sheep/goats), and even date remains (e.g. de Miroschedji 1981a: 27). The NE II burial assemblages, with the Arjan and Jubaji tombs at their pinnacle, reveal substantially more wealth and greater variety in material production than those of the NE I. Like the intensification of building activities boasted by kings and the movement of goods attested in the Acropole texts, these changes are no doubt linked to favourable socio-political and economic circumstances. One can point especially to Elam's success in controlling important long-distance trade routes, which must have provided significant impetus for its Babylonian alliances, and its ability to maintain relations with the agro-pastoralist groups occupying its border areas (Henkelman 2008: 35–39).

Conclusions

The conception of the Neo-Elamite period as one of decadence and decline has been outmoded by the recent unveiling of a vital and fascinating cultural landscape inherited by the Achaemenid Persians. Yet our understanding of Elam at this time, as in all periods of its history, is still largely reliant on the results of investigations in the lowland areas, particularly at Susa. This situation negates the possibility of recreating the true character of its lowland-highland identity, particularly at a time when the foothills were the preferred power bases. As the number of chance finds gradually accrues with development works in these zones, and planned excavations of promising sites are carried out, a more complete picture of Neo-Elamite Elam will undoubtedly continue to crystallize.

Abbreviations

ABC	Grayson, A.K. 1975. <i>Assyrian and Babylonian Chronicles</i> . Locust Valley: Augustin.
ABL	Harper, R.F. 1892–1924. <i>Assyrian and Babylonian Letters belonging to the K(ouyunjik) Collection(s) of the British Museum</i> , 14 vol. Chicago: University of Chicago Press.
BIWA	Borger, R. 1996. <i>Beiträge zum Inschriftenwerk Assurbanipals. Die Prismenklassen A, B, C, K, D, E, F, G, H, J und T sowie andere Inschriften</i> . Wiesbaden: Harrassowitz.
CDAFI	<i>Cahiers de la délégation archéologique française en Iran</i> .
CM	Glassner, J.J. 1993 [2004 ²]. <i>Chroniques mésopotamiennes</i> . Paris: Les Belles Lettres.
DB	Darius, Bisitun inscription.

- DL H.T. Wright and J.A. Neely (eds.) 2010. *Elamite and Achaemenid Settlement on the Deh Luran Plain: Towns and Villages of the Early Empires in Southwestern Iran*. Ann Arbor: Regents of the University of Michigan.
- EKI König, F.W. 1965 (=1977²). *Die elamischen Königsinschriften*, AfO Beihefte 16. Graz: Biblio Verlag.
- EP J. Álvarez-Mon and M.B. Garrison (eds.) 2011. *Elam and Persia*. Winona Lake: Eisenbrauns.
- IRS Malbran-Labat, F. 1995. *Les inscriptions royale de Suse. Briques de l'époque paléo-élamite à l'empire néo-élamite*. Paris: Éditions de la Réunion des musées nationaux.
- MDP *Mémoires de la Délégation française en perse; Mémoires de la Délégation archéologique en Iran*.
- Nin *The Elamite Nineveh Letters*, numbers given by Weissbach (1902).
- RCS Harper, P. O., Aruz, J. and Tallon, F. (eds.) 1992. *The Royal City of Susa: Ancient Near Eastern Treasures in the Louvre*. New York: Metropolitan Museum of Art.
- RIMA The Royal Inscriptions of Mesopotamia, Assyrian Period, Toronto.
- RINAP The Royal Inscriptions of the Neo-Assyrian Period, Toronto.
- RIA *Reallexicon der Assyriologie und vorderasiatischen Archäologie*.
- SAA The State Archives of Assyria, Helsinki.
- SE K. De Graef and J. Tavernier (eds.) 2013. *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*, MDP 58. Leiden: Brill.
- ZA *Zeitschrift für Assyriologie*.

Bibliography

- Alizadeh, A. 2014. *Ancient Settlement Systems and Cultures in the Ram Hormuz Plain, Southwestern Iran*, Oriental Institute Publications 140. Chicago: The University of Chicago.
- Álvarez-Mon, J. 2010. *The Arjan Tomb: At the Crossroad of the Elamite and the Persian Empires*, Acta Iranica 49. Leuven: Peeters.
- . 2013a. Elam in the Iron Age. In: D.T. Potts (ed.) *The Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press, 457–477.
- . 2013b. Braids of Glory. Elamite Sculptural Reliefs from the Highlands: Kül-e Farah IV. *SE* 207–248.
- . 2014. Platforms of Exaltation Elamite Sculptural Reliefs from the Highlands: Kül-e Farah VI. *Elamica* 4: 1–50.
- . forthcoming. *Monumental Reliefs of the Elamite Highlands*.
- Álvarez-Mon, J., Garrison, M.B. and Stronach, D. 2011. Introduction. *EP* 1–32.

- Amiet, P. 1966. *Elam*. Paris: Archée Éditeur.
- . 1967. Éléments émaillés du décor architectural néo-élamite. *Syria* 44: 27–46.
- . 1973. La glyptique de la fin de l'Élam. *Arts Asiatiques* 28: 3–45.
- Basello, G.P. 2011. Elamite as Administrative Language: From Susa to Persepolis. *EP*: 61–88.
- . 2013. From Susa to Persepolis: The Pseudo-Sealing of the Persepolis Bronze Plaque. *SE*: 249–246.
- Carter, E. 1994. Bridging the Gap Between the Elamites and the Persians in Southeastern Khuzistan. In: H. Sancisi-Weerdenburg, A. Kuhrt and M.C. Root (eds.) *Achaemenid History VIII, Continuity and Change*. Leiden: Nederlands Instituut Voor Het Nabije Oosten, 65–95.
- . 1996. *Excavations at Anshan (Tal-e Malyan): The Middle Elamite Period*. Philadelphia: University of Philadelphia.
- . 2007. Resisting Empire: Elam in the First Millennium BC. In: E.C. Stone (ed.) *Settlement and Society: Essays Dedicated to Robert McCormick Adams*. Los Angeles: Cotsen Institute, 139–156.
- Carter, E. and Wright, H.T. 2010. Ceramic Phase Indicators in Surface Assemblages. *DL*: 11–22.
- Carter, R.A., Challis, K., Priestman, S.M.N. and Tofighian, H. 2006. The Bushehr Hinterland Results of the First Season of the Iranian-British Archaeological Survey of Bushehr Province, November–December 2004. *Iran* 44: 63–103.
- Dalley, S. and Postgate, N. 1984. *Tablets from Fort Shalmaneser*. London: British School of Archaeology in Iraq.
- De Mecquenem, R. 1924. Fouilles de Suse: Campagnes 1923–1924. *Revue d'Assyriologie et d'archéologie orientale* 21: 105–118.
- De Miroschedji, P. 1978. Stratigraphie de la période néo-élamite à Suse (c. 1100–c. 540). *Paléorient* 4: 213–228.
- . 1981a. Fouilles du chantier Ville Royale II à Suse (1975–1977). *CDAFI* 12: 9–136.
- . 1981b. Observations dans les couches néo-élamites au nord-ouest du tell de Ville Royale à Suse. *CDAFI* 12: 143–167.
- . 1981c. Prospections archéologiques au Khūzistān en 1977. *CDAFI* 12: 169–192.
- . 1990. Note d'orfèvrerie Neo-Elamite. In: F. Vallat (ed.) *Contribution à l'histoire de l'Iran: mélanges offerts à Jean Perrot*. Paris: Editions Recherche sur les civilisations, 181–194.
- De Vaan, J.M.C.T. 1995. *Ich bin eine Schwertklinge des Königs. Die Sprache des Bēl-Ibni*. Alter Orient und Alter Testament 242. Neukirchen-Vluyn: Neukirchener Verlag.
- Frame, G. 1992 [2007]. *Babylonia 689–627 B.C. A Political History*. Istanbul: Nederlands historisch-archaeologisch instituut.
- Fuchs, A. 2003. Review of M. Waters, 2000. *ZA* 93: 128–137.
- Ghirshman, R. 1966. *Tchoga Zanbil (Dur-Untash)*. Vol. I, Temenos, Temples, Palais, Tombes, MDP 39. Paris: Librairie orientale Paul Geuthner.
- Gorris, E. 2013. Remarques sur la Lettre ninivite quatorze (BM 83–81–18,307) en langue élamite. *Le Muséon* 126: 8–16, Pl. 5.
- . 2014. *Power and Politics in the Neo-Elamite Kingdom*. PhD Diss. Université catholique de Louvain, Louvain-la-Neuve.
- . 2017. Crossing the Elamite Borderlands. A Study of Interregional contacts between Elam and the Kingdom of Hara(n). In: Tavernier, J., Gorris, E., Abraham, K. and Boschloos, V. (eds.) *Topography and Toponymy in the Ancient Near East. Perspectives and Prospects*, PIOL 71. Leuven: Peeters.
- Heim, S. 1992. Glazed Objects and the Elamite Glaze Industry. *RCS*: 202–210.
- Henkelman, W.F.M. 2003a. Persians, Medes and Elamites: acculturation in the Neo-Elamite period. In: Lanfranchi, G., Roaf, M. and Rollinger, R. (eds.) *Continuity of Empire (?) Assyria, Media, Persia*. Padua: S.a.r.g.o.n. Editrice e Libreria, 181–231.

- . 2003b. Defining Neo-Elamite History, review of Waters, 2000. *Bibliotheca Orientalis* 60: 252–263.
- . 2008. *The Other Gods Who Are: Studies in Elamite-Iranian Acculturation Based on the Persepolis Fortification Tablets*. Achaemenid History XIV. Leiden: Nederlands Instituut voor het Nabije Oosten.
- . 2011. Parnakka's Feast: šip in Pārsa and Elam. *EP* 89–166.
- . 2012. Tammāritu. *RLA* 13.5/6: 432–433.
- König, F.W. 1965 [1977]. *Die elamischen Königsinschriften*. AfO Beihefte 16. Graz: Biblio Verlag.
- Jafari, M.J. 2013. Report of the Third Season of Archaeological Excavation at Lama Cemetery, Iran. *Iranian Archaeology* 4: 58–77.
- Malbran-Labat, F. 2012. Susa. *RLA* 13/3: 347–352.
- Mofidi-Nasrabadi, B. 2005. Eine Steininschrift des Amar-Suena aus Tappeh Bormi (Iran). *ZA* 95: 161–171.
- . 2007. *Archäologische Ausgrabungen und Untersuchungen in Čoğā Zanbīl*. Münster: Verlag GmbH.
- . 2013. *Planungsaspekte und die Struktur der altorientalischen neugründeten Stadt in Choga Zanbil*. Aachen: Shaker Verlag.
- Moghaddam, A. and Miri, N. 2007. Archaeological Surveys in the “Eastern Corridor”, South-Western Iran. *Iran* 44: 23–55.
- Potts, D.T. 2010. Monarchy, Factionalism and Warlordism: Reflections on the Neo-Elamite courts. In: Jacobs, B. and Rollinger, R. (eds.) *Der Achämenidenhof*. Wiesbaden: Harrassowitz, 107–138.
- . 2013. In the Shadow of Kurangun. Cultural Developments in the Highlands between Khuzestan and Anšan. *SE*: 129–137.
- . 2016. *The Archaeology of Elam: Formation and Transformation of an Ancient Iranian State*. 2nd ed. Cambridge: Cambridge University Press.
- Potts, D.T., Roustaei, K., Petrie, C.A. and Weeks, L.R. 2009. *The Mamasani Archaeological Project Stage One. A report on the first two seasons of the ICAR – University of Sydney expedition to the Mamasani District, Fars Province, Iran*. Oxford: Archaeopress.
- Scheil, V. 1917. Déchiffrement d'un document anzanite relative aux presages. *Revue d'assyriologie et d'archéologie orientale* 14: 29–59.
- Shishegar, A. 2015. *Tomb of the Two Elamite Princesses of the House of King Shutur-Nahunte Son of Indada*. Tehran: Cultural Heritage, Handcrafts and Tourism Organization.
- Steve, M.-J. 1987. *Nouveaux mélanges épigraphiques. Inscriptions royales de Suse et de la Susiane* MDP 53. Nice: Éditions Serré.
- . 1992. *Syllabaire élamite: Histoire et paléographie*, Civilisations du Proche-Orient, série 2: Philologie. Neuchâtel-Paris: Recherches et Publications.
- Steve, M.-J., Vallat, V. and Gasche, H. 2002/2003. Suse. *Supplément au Dictionnaire de la Bible* 73–74: 359–592.
- Stolper, M.W. 1984. *Texts from Tall-i Malyan I. Elamite Administrative Texts (1972–1974)*. Philadelphia: Babylonian Fund.
- . 1987–1990. Mālamīr, B: Philologisch. *RLA* VII: 275–281.
- . 1992a. Stele of Adda-hamiti-Inshushinak: The Inscription. *RCS*: 199.
- . 1992b. Cuneiform Texts from Susa. *RCS*: 256–260 and 267–269.
- Tavernier, J. 2004. Some Thoughts on Neo-Elamite Chronology. *ARTA* 003.

- . 2014. What's in the Name: Hallušu, Hallutaš, or Hallušu. *ZA* 108: 61–66.
- Valipour, H.R., Mostafapour, I., Davoudi, H., Zifar, H., Ghanbari, B. and Karimi, H. 2011. Preliminary Report on the First Season Excavations at Kalantar 4 Site, Gotvand Dam Basin, Khuzestan. *Payam-E Bastanshenas* 7: 49–76.
- Vallat, F. 1998. Elam, vi. Elamite Religion. *Encyclopaedia Iranica* VIII: 335–342.
- . 1993. *Les noms géographiques des sources suso-élamites* RGTC 11. Wiesbaden: Reichert.
- . 1996. Nouvelle analyse des inscriptions néo-élamites. In: H. Gasche and B. Hrouda (eds.) *Collectanea Orientalia. Histoire, arts de l'espace et industrie de la terre. Études offertes en hommage à Agnès Spycket*. Civilisations du Proche-Orient 1, Archéologie et environnement 3. Neuchâtel-Paris: Recherches et Publications, 385–396.
- . 2002. Review on Waters M.W. A Survey on Neo-Elamite History. *Orientalistische Literaturzeitung* 97/3: 372–376.
- . 2011. Textes historiques élamites et achéménides. In: A.R. George (ed.) *Cuneiform Royal Inscriptions and Related Texts in the Schøyen Collection*. Cornell University Studies in Assyriology and Sumerology 17. Bethesda: CDL Press, 187–192.
- Waters, M.W. 2000. *A Survey of Neo-Elamite History* (SAAS 12). Helsinki: Neo-Assyrian Text Corpus Project.
- . 2006. Four Brothers and a Throne, In: A. Guinan et al. (ed.) *If a Man Built a Joyful House. Assyriological Studies in Honour of Erle V. Leichty*. Leiden: Brill, 499–502.
- Weisberg, D.B. 2003. *Neo-Babylonian Texts in the Oriental Institute Collection*. OIP 122. Chicago: University of Chicago Press.
- Weissbach, F.H. 1902. Susische Thontäfelchen. *Beiträge zur Assyriologie* 4: 168–202.
- Wicks, Y. 2015. *Bronze 'Bathtub' Coffins in the Context of 8th-6th Century BC Babylonian, Assyrian and Elamite Funerary Practices*. Oxford: Archaeopress.
- . 2017. "Alas, Short is the Joy of Life!" *Elamite Funerary Practice in the First Half of the First Millennium BCE*. PhD Diss. The University of Sydney.
- . forthcoming a. Vessels of Note: The Bronze "Inkwells" of Luristan and Elam. *Iranica Antiqua* 53 (2018).
- . forthcoming b. Female, Fish and Frying Pan: An Enigmatic Funerary Object Unique to Elam, In: De Graef, K., Gorris E. and Tavernier, J. (eds.) *Susa and Elam. History, Language, Religion and Culture: Proceedings of the Second Susa and Elam Conference Held at Université catholique de Louvain, July 6–9, 2015*. Leiden: Brill.
- Wright, H.T. 2010. Early Historic Settlement Patterns on the Deh Luran Plain. *DL*: 83–94.
- Wright, H.T. and Neely, J.A. 2010. A Land Between: Reflections on Early Historic Deh Luran. *DL*: 113–116.

Part IV

Close encounters on the eastern and western fronts



CHAPTER FOURTEEN

Great Domino games

From Elam, looking eastwards



Massimo Vidale

Naram-Sin's enemy is also my enemy, Naram-Sin's friend is also my friend.
(from the Treaty of Naram-Sin, D. T. Potts 1999: 111)

The enemy of my enemy is my friend.
If the enemy of my enemy is my friend, then a friend of my enemy, is my enemy.
The enemy of my enemy can still be my enemy.
(ancient proverbs, now widely spread by weblore)

Introduction

The goal of the following pages is to present some aspects of the relationships of the Elamite world¹ with the protohistoric polities of the eastern Iranian Plateau during the 3rd millennium BC. The (somewhat disconnected) starting points will be: the partial scenarios of the spread and abandonment of the “Proto-Elamite” writing systems across the Iranian Plateau; afterwards, the fragmentary historical geography of the same Plateau during the Middle Bronze age reconstructed by Piotr Steinkeller (1982, 2006, 2008, 2014); the acknowledgement that *L'âge des échanges inter-iraniens* (Amiet 1986, 2007) for more than four centuries (ca. 2300–1900 BC) was “a period marked by an astonishing intensification of international contacts ... complicated by a number of different and not necessarily contrastive facets like military conquest and raids, interdynastic marriage ... both as a mean of alliance and/or control, and intensive and patterned commercial enterprises on the long distances” (Salvatori 2010: 245).

I will try to compare what we have from well-known and frequently quoted historical sources (to a great extent coming from royal inscriptions from Mesopotamia) with the

fragmented, heterogeneous inventories of archaeological finds that witness contacts and materials exchanges among the involved protohistoric centers of power. Looking to Steinkeller's map of the eastern polities ([Figure 14.1](#)), and considering the abundant historical and archaeological reconstructions of the proto-history of south-western Iran (including Carter 1998; Carter and Stolper 1984; T. F. Potts 1994; D. T. Potts 1999, and the above-mentioned papers of Steinkeller), it is clearly impossible to discuss the eastern interactions of the Elamite world without considering at the same time, even marginally:



[Figure 14.1](#) The eastern polities of the 3rd millennium BC as reconstructed by Piotr Steinkeller (1982), in a map drafted by F. Desset.

- (1) the contacts and clashes of Elam with the Sumerian and Akkadian city-states, and with the later empires and kingdoms;
- (2) the interactions among the single eastern powers, of which we know much less, or – in some important cases – almost nothing;
- (3) the interactions of the Akkadian world with the individual eastern polities, and their consequences for international scenarios.

Between snippets of information and major voids, the history of the last centuries of the 3rd millennium BC indicates that, like in a Domino game with multiple players, each eastern polity, from the Indus to the Oxus to the shores of the Persian Gulf, could communicate and interact with its neighbors through some specific, sometimes ephemeral, aspects of their economic and political systems. In Domino terms, these specific interests might be visualized as the matching numbers of the tesserae: adjoining pieces with the same numbers could form temporary, long interaction chains. But in another mode of the game, the same tesserae could stand up to fall one on the other, alone or in groups, determining fast, ruinous and sometimes

unpredictable chain effects in a global collapse.

Heterogeneity of the sources

One of the main obstacles to a balanced historical reconstruction is the intrinsic heterogeneity of the available sources. Mesopotamia, the main character of our narratives, is better known. It has a textual heritage that, although almost overwhelming, is still largely ignored by archaeologists that work in Middle Asia, and even (with few exceptions) by those active in the Near East. Sadly, field archaeology, archaeometry² and historiography based upon textual sources often work at scales of detail that are incompatible or do not tackle the same questions; these fields of study are still searching for common languages. Moreover, the available Mesopotamian cuneiform texts come mostly from large archives abandoned or destroyed at the end of the 21st century BC during the collapse of the Ur III centralized state. Almost paradoxically, such an abundance of historical evidence and a long tradition of archaeological exploration still coexist with major faults and uncertainties in the main chronological frameworks.

In contrast, the archaeology of the easternmost pole of early urban life, the Indus valley civilization, is based upon a solid chronological grid formed using hundreds of coherent radiocarbon dates (increased by recent field research after the publication of Kenoyer 1991); from some points of view, its material culture is much better known than that of the west, and its changing patterns of regional trade have been thoroughly investigated (e.g. Law 2011). But even those who, like me, are fond of the Indus civilization will admit that archaeological phases and moved rocks, in absence of written and deciphered texts, still have limited historical bearing for the wider global picture of the social evolution of Southern Eurasia.

The lands in between, the semi-arid endoreic basins and inner valleys of Middle Asia, between southern Central Asia, the northern coasts of the Persian Gulf, the Zagros to the west and western Baluchistan to the east, hosted a variety of settled or semi-sedentary lives, and often emerging large early urban polities, known and excavated only to a minimal extent (Vidale 2010). Writing technologies appeared on the Iranian Plateau as a rare, discontinuous variable; their evolutionary trajectory is unknown, and the two main systems presently under study (so-called Proto-Elamite and Linear Elamite) are still far from being deciphered (Englund 1996; Dahl 2013; Desset 2012). Furthermore, the discovery at Konar Sandal South of a new form of geometric writing dated to the the second half of the 3rd millennium BC (Desset 2014) has recently introduced new and unexpected problems.

Both Soviet archaeology in southern Central Asia (Masson and Sarianidi 1972; Kohl 1984) and pre-Islamic archaeology across the Iranian Plateau had long-established traditions of field research, but since the late 1970s the Islamic Revolution in Iran and the Afghan collapse have

completely changed the picture. While pre-Islamic archaeology in Iran was relinquished for a generation of studies, the vanishing of state control and spreading poverty in many unexplored regions of Central and Middle Asia allowed a general, devastating looting of hundreds of archaeological sites (Pottier 1984; Ligabue and Salvatori 1988; Vidale 2017).

Meanwhile, after 1989, the independence of Turkmenistan subtracted local archaeology from the prestigious leadership of Leningrad's academy. As a consequence, the landmark discoveries of the great Bronze Age palatial centres of Margiana took place under decreased scientific standards, and quite questionable interpretations were made (Sarianidi 1998, 2002, 2006, 2007, 2008). However, even in this problematic light, the Oxus civilization, a great, previously unknown actor, had come to light.

The more recent discovery (through another ruinous looting) of another powerful Middle Bronze age polity apparently centered on the Konar Sandal site complex (Madjidzadeh 2003, Madjidzadeh and Pittman 2008), ca. 30 km south of Jiroft (Kerman, Iran), identified by P. Steinkeller (2014) with the ancient country of Marhaši, and of new early-urban settlements along the piedmont of the Jazmurian depressions (Heydari et al. 2015) suggest that many of the proposed reconstructions, and not a few theories, had been built on substantial gaps of knowledge rather than on reliable archaeological data (gaps are perfect for archaeological reconstructions: as far as they remain such, there is no need for updating and organizing the data). This chapter will argue that voids in historical knowledge of protohistoric Middle Asia are still generalized, to the extent that even a single object – for example, the Oxus silver goblet from a private collection (see section ‘A new Oxus figured silver vessel’) – may change our understanding of ancient history, and that well-known iconographic sources, in light of the emerging historical picture, can be interpreted in a new, transformed light (see section “Bad buffaloes vs. good buffaloes”).

From models to reality

Among the most important traditional theories, some very influential since the 1970s, is the world-system theory imposed onto the relationships between Mesopotamia and the almost completely unknown highland “peripheries” (among others, Algaze 1989, 1993; Stein 1998). From this theory, in turn, was derived the view that centers of the eastern Iranian Plateau like Tepe Hissar and Shahr-e Sokhta had hosted commercial enterprises that exploited their intermediate geopolitical setting to make profits by rough-cutting lapis lazuli and other stones along the routes to Mesopotamian markets (Tosi 1974; Tosi and Piperno 1973). Recent palaeotechnological studies on the lapis lazuli workshops at Shahr-e Sokhta (Vidale and Lazzari 2017), in contrast, do not confirm such a wide-scale economic adaptation, but reveal a simple, efficient bead-making industry to meet local demand, possibly interlaced with the movements of nomadic pastoralists.

Similarly, the early discovery at Tepe Yahya – a small settlement at the presumed western margin of the Halil Rud or Marhaši civilization – of a manufacturing area of elaborated carved chlorite objects (Lamberg-Karlovsky 1970; Kohl 1975, 1977). The evidence supported a then-palatable “intercultural style” (Lamberg-Karlovsky 1988) purposefully invented by specialized craftsmen of the Plateau for selling their decorated stone pots along the Gulf and in Mesopotamia. The discoveries of the Jiroft sites now demonstrate that the purported “intercultural style” actually materialized the myths and ideology of powerful local dynasties rather than the long-distance profits of shrewd and crafty entrepreneurs. The wide diffusion of these products, including the whole corpus of the Tarut chlorite vessels fragments (Zarins 1978), would be better investigated taking into account the possible multitude of different processes and contingencies (Vidale 2015).

No one wants to simply dismiss the crucial role of long-distance trade in the development of the early urban communities of the Iranian Plateau, but, at least as far as lapis lazuli and chlorite are concerned, the eastern settlements were extracting or importing the stones for making their own ornaments rather than for trading them westwards. In this light, the loads of raw lapis blocks stored in Royal Palace G at Ebla (Pinnock 1995) that are not rough-cut³ but simply reduced to convenient lumps for transport would rather suggest direct forms of procurement near the source areas (possibly through state-sponsored parties similar to Hatshepsut’s Punt expeditions).

A recent study by T.C. Wilkinson (2012) of trade flow in the Bronze Age in terms of route inertia and dynamism, and dedicated GIS studies, came to the conclusion that the current understanding of “... hierarchy of routes, or the actual density of traffic along these roads or routes” is extremely low, and that much of what has been written, so far, is basically superficial “archaeological imagination” (Wilkinson 2012: 312). The same impression is supported by the almost total archaeological blank represented by the notion of a great sea route managed by “Meluhhans” that brought westwards cargoes of lapis lazuli, precious wood, animals and other exotica, conveyed by not a few cuneiform texts of variable nature (see Pettinato 1972; Frenez 2011; Kenoyer 2008; Ratnagar 2004; Possehl 1996; T.F. Potts 1994; Chakrabarti 1990 and others), but still not archaeologically matched by the same finds in enclaves and ports⁴ and reliable administrative documents.

Eventually, the fading models on the primary causal roles of long-distance trade made abundantly clear that:

... il est aujourd'hui difficile et sans doute insuffisant de tenter d'appréhender les populations de ces régions sous l'optique unique de modèles économiques fondés sur les “grands échanges” impliquant des relations de dépendance des territoires du Plateau Iranien à l'Asie centrale méridionale vis-à-vis de la Mésopotamie, auxquels a été associé le développement d'entités politiques qui en assuraient le contrôle sur le Plateau iranien, comme le “phénomène proto-élamite” (Mutin 2012: 269).

“Proto-Elamite” (PE) communities of interest, ca. 3200–2800 BC

The applicability of concepts like that of a Proto-Elamite (hereafter PE) phenomenon, state, culture, civilization, let alone that of PE “peoples” has been the subject of considerable debate and major revisions (among others, consider the balanced and sharp remarks in Abdi 2003). Obviously enough, many dimensions of ambiguity still revolve around the definition of “civilization” and how far this label can be loosely applied to the archaeological picture of the earliest centres of power of the Iranian Plateau around ca. 3000 BC.⁵ We may legitimately wonder if we are dealing with “civilization”, but even more, whether this network should be considered “a” civilization, therefore assuming not only comparable levels of complexity but also the use of the same language(s), cultural identities and the same institutions.

The term “communities of interest”, here applied to the different cores of the PE administrative technology, is adopted from a version of “community of practices” developed by cognitive anthropologists in the early 1990s (Hildreth and Kimble 2004) and now successfully applied in archaeological craft studies (Wendrich 2006, 2012; Kohring 2012; Sassaman and Rudolphi 2001; Vidale et al. 2016a). The underlying theory is that, as a response to sudden transformations, possibly linked to radical changes like those brought on by globalization trends, organizations based upon formalized roles and hierarchies, and made of specialized functional blocks, would move towards more fluid and emergent social forms such as networks and communities. This shift would involve a relatively open access to the peripheral participation of newcomers and intensive shared learning, ultimately resulting in unusually fast forms of socio-technical innovation and general change.

Possibly, in the late 4th millennium BC, in the frame of the still mysterious interactive processes of the “Uruk expansion” across wide stretches of the Iranian Plateau (Algaze 1989, 1993; Stein 1999a; Petrie 2013, and many others) and the northern areas (e.g. Stein 1999b), local communities of the Iranian Plateau intercepted important flows of information. They became first familiar with the use of numeral/numeral logographic notations, and then invented or learnt to master writing systems linked to the Susa III tradition, and to shape for themselves pivotal roles in the management of local rural economies (as described for Godin Tepe by Matthews 2013 and found for Tepe Yahya by Damerow and Englund 1989).

Such communities of interest possibly involved families with preferential access to land exploitation, chief herdsman and/or religious and political leaders. They implemented a certain degree of centralization of the local rural production through archives and granaries or warehouses, by monitoring with permanent written documents the storage and distribution of cereals, livestock and secondary products and the work of laborers and slaves. Literacy may have been taken over by a composite, fluid social context rather than being imposed by an established formal hierarchy. As remarked on several occasions, valuable craft goods and their distribution are peculiarly absent from these written records, thus denying their presumed

association to the profitable long-distance trades envisaged in the 1970s.

It is not clear how the different PE information processing centers (from Susa to Tal-i Ghasir, Tal-i Malyan, Tepe Yahya, Shahr-e Sokhta, Tepe Sialk, Tepe Sofalin and Tepe Ozbaki) materially interacted and culturally affected each other. Apparently not much, judging from the noticeable regional variations in the signs, but this might be an artifact of a biased approach. In the quicksand of a serious problem of absolute chronology (Dahl et al. 2013), the focus is on the relationships of the outer centers with Susa and the latest ceramic similarities with the late Uruk complexes of lower Mesopotamia rather than the possible active links among the various centers with PE administrative evidence of the Iranian Plateau.

PE communities of interest, however, seem to have exhausted their roles, economic potential and prestige soon after 2800 BC. While in the Central-western Plateau (Ramhormoz plains and Kur river basin) PE information technology came to an end together with centralized urban life, more eastwards it was abandoned while major cities like Shahdad, Konar Sandal and Shahr-e Sokhta reached their maximum size.

The ephemeral rise and dissolution of PE literacy (McCall 2013: 284), ultimately, might be better explained by a “from the bottom up” perspective that does not imply a centralized government structure nor necessarily the sharing of the same language or languages, or of any particular ideological form, but – as wittily pointed out by R. Matthews (2013) – the fragile social preeminence intrinsic in the use of writing itself.

Historical and archaeological evidence, ca. 2900/2800-1800 BC

This section attempts to make a broad correlation between the reconstruction of the main historical events of the 3rd millennium BC, first strictly after well-known and widely discussed western sources ([Table 14.1](#)), then to combine in a general picture for the second half of the same millennium the evidence of selected material contacts among the eastern polities across the Iranian Plateau ([Table 14.2](#)). The partiality, intricate details and ambiguities of the data are not represented in the following tables; a proper discussion may be found in D. T. Potts 1999 and 2013, my main sources are articles by Ascalone 2006 and Steinkeller on the history of Marhaši.

[Table 14.1 Historical evidence of interaction between the Mesopotamian states and the eastern polities across the Iranian Plateau, ca. 2900/2800 to 1800 BC. The ethnonym of Marhaši, for simplicity, is here maintained in place of the Akkadian Barahshum.](#)

<i>Mesopotamia</i>	<i>Lowlands</i>	<i>Highlands</i>	<i>Marhaši</i>	<i>Meluhha</i>
First half of the 3rd millennium BC: hostilities of Early Dynastic	Clashes with Elam, Awan and other locations		Early Dynastic “cities” seal impression	

rulers against portions of the western Iranian Plateau		at Konar Sandal South	
ca. 2300–2250 BC Sargon's conquests. Booty from Arawa, Sali'amu, Kardede, Heni, Bunban, Sapum, Awan and Susa.	Destruction of Elam, Arawa, Sali'amu, Kardede, Heni, Bunban, Huzi-x, Gunilaha, Sapum (part of Simaški), Awan, Susa, Sherihum. Akkadian city governors at Susa	Marhaši listed among the defeated polities. Linear Elamite tablets at Konar Sandal South	Meluhha's ships at the docks of Akkad (royal propaganda inscriptions)
Rimush's campaigns. Stone vessels, gold, copper, slaves, diorite and <i>dushu</i> -stone brought back as booty	Elam and Marhaši chief enemies of Akkad. Defeat of Zahara, Elam, Marhaši at Marhaši itself, and capture of its king Abalgamash and his general Sidga'u; "... he tore the roots of Marhaši out of the land of Elam". Mention of Gupin		Mention of Meluhha as enemy
Manishtushu's campaigns	Conquest of Anshan (Tall-i Malyan in Fars), Sherihum and Pashime (western Iranian coasts of the Persian Gulf)		
Naramsin campaigns. Stone vessels as booty from Magan	Conquest of Lullubum (northern Zagros) and Elam. General rebellion against Akkad. Naramsin's alliance treaty with an unnamed Iranian polity at Susa(?)	Akkadian defeat of Marhaši	
Sharkalisharri	Elam and Zahara attacked Babylonia but were defeated; capture of Sarlagab king of Gutium (northern Zagros)	Interdynastic marriage with a princess of Marhaši	
Dudu	Campaign against Elam (?)		
ca. 2100 BC: fall of Akkad, Gutium's rise to power in Mesopotamia and part of Elam.	Puzur-Inshushinak ⁶ ruler of Susa, Awan, Anshan?		

Growing control of the Anshanites on Babylonia		
Gudea of Lagash	... defeated Anshan in Elam	
Ur-nammak rise to power, founding of the Ur III dynasty.	Ur-nammak's campaign against Puzur-Inshushinak. Susa again under Mesopotamian rule	
Members of Puzur-Inshushinak family captives in Ur		
Shulgi's reign. Semi-precious stones, gold, silver and copper taken at Ur as booty	Some aggressions against eastern polities, interdynastic marriages with the houses of Anshan and Pashime. Susa and other eastern cities were taxable; Anshan, Kimash, Zabshali, Huhnur, Simaški and others had a variable status. Eventual rise of the royal house and polity of Simaški	Diplomats from Marhaši at Drehem. Liwwir-Mittashu, daughter of Shulgi, marries a prince of Marhaši
Amar-Sin	Intense diplomatic exchanges with eastern cities and particularly with Marhaši; limited military campaigns to the east	
Shu-Sin	A daughter of the king married a prince of Anshan; attack on Zabshali and other eastern locations	
Ibbi-Sin	A daughter of the king married a governor of Zabshali; attacks on Huhnur, Susa, Awan and other eastern centers of power	Further diplomatic exchanges with Marhaši
Ibbi-Sin year 24: Ur destroyed by Elamites and Simaškians. The king captured and brought in chains to Anshan		
Isin-larsa period	Sukkalmah period, consolidation of power by the "kings of Anshan and Susa"	?

[Table 14.2 Material evidence of interaction between a series of excavated early urban poles of the Iranian Plateau in the](#)

second half of the 3rd millennium (ca. 2600–1800 BC). Sources: D. T. Potts 1999; Amiet 1986, 2007; Ascalone 2006; D. T. Potts 2008a, 2008b; Hakemi 1997; Cortesi et al. 2008; Baghestani 1997; Vidale and Frenez 2015; Kaniuth 2010; Franke 2010, and other works quoted in this chapter. *, at Tepe Yahya, means that carved chlorite artifacts at the time were made locally. **

Vidale and Lazzari, ongoing research on the richest graves of Shahr-e Sokhta, Period III, phase 3.

	<i>Susa</i>	<i>Konar Sandal and south-east Iran</i>	<i>Oxus sites (Namazga V-VI)</i>	<i>Persian Gulf</i>	<i>Indus valley, Baluchistan</i>
Susa		Carved chlorite vessels, séries ancienne and recente, cylinder seals and impressions, a chlorite statuette(?)	Copper compartmented seals, various types of bronze axes, gold eagle-like applique, stone columns and disks; segmented copper tyres for carts, faience vessels? Carved chlorite vessels, séries recente?	Gulf seals, Dilmunite seals and impression	Etched beads, carnelian beads, cubic micro-weight, shell bangles and disks from <i>Turbinella pyrum</i> , transformed Indus seal, head of a stone statue, Gulf seal
Tall-i Malyan			“Bactrian ladies” on Anshanite seals		
Konar Sandal	Linear Elamite inscriptions on terracotta tablets		Basic repertory of copper vessels, pins, copper compartmented seals, stone columns		Transformed Indus seal, etched beads, carnelian beads, cubic micro-weights, Rohri chert, green onyx, Dalbergia wood
Tepe Yahya		Carved chlorite vessels*, série ancienne and recente, cylinder seals and impressions	Copper compartmented seals	Gulf seal	Pot stamped with Indus seal, Gulf seal
Shahdad	Linear Elamite inscription on ceramic vessel?	Carved chlorite vessels, série ancienne and recente	Basic repertory of copper vessels, pins and other items; form of domestic ovens, stone columns		Etched beads
Tepe Hissar, Tureng Tepe			Stone columns and disks, agate and gold beads (?), gold vessels, copper compartmented seals		
Oxus sites (Namazga V-VI)	Linear Elamite inscription on silver vessel(?) with images of “Bactrian ladies”	Carved chlorite vessels, série ancienne, série recente. Evidence of warfare between the Oxus and Marhashi (in this chapter, see below)		Carved chlorite vessels, serie recente	Steatite stamp seals, carnelian and agate beads, ivory gaming pieces, etched beads, steatite pots with Indus motifs, faience vessels. Resident Indus families of craftsmen and traders?
Shahr-e Sokhta and Mundigak		Carved chlorite vessels, série ancienne	Stone columns, copper compartmented seals, kneeling statuettes	Some families from the Halil Rud valley might have moved to Sistan with their funerary codes**	Before 2500 BC, imports of domestic items After 2500 BC, hell bangles and inlays, terracotta cakes and figurines, steatite beads, <i>Dalbergia</i> wood
Persian Gulf			Steatite stamp seals, copper mirrors(?)		Ivory combs, Indus seals, transformed Indus seals, carnelian and etched carnelian beads, pots stamped with Indus seals
Indus valley, Baluchistan		Carved chlorite vessels, série ancienne	Copper compartmented seals, steatite stamp seals, kneeling statues, composite statuettes (“Bactrian ladies”)	Gulf-like seals, Dilmunite seal	

[Table 14.1](#) shows, once again, how fragmentary and unhomogeneous are our sources. For the first half of the 3rd millennium, royal inscriptions are quite scanty (D. T. Potts 1999: 87–99) but the so-called and much discussed Sumerian King List (see Marchesi 2010) registers an attack of Enmebaragesi of Kish against the highlands, a destruction of Ur by the Awanites and the destruction of Awan by Kish. As summarized in D. T. Potts 1999, between the 27th and 26th centuries BC, Lagash persistently clashed with eastern polities like Arawa, Uru'aza, Susa and Mishime, all located within or at the edge of the sphere of influence of the future Elamite powers (D. T. Potts 1999: 89; see also Álvarez-Mon 2013).

It is important to stress that Y. Madjidzadeh found, in the earliest layers so far uncovered in the settlement of Konar Sandal South, an impressed clay tag of the type commonly known as “city seals”, bearing among others the symbol of Ur (Madjidzadeh and Pittman 2008: 100, Figure 32e). The clay sealing, applied to a door, belongs to an early settlement horizon of the city, preliminarily dated by a ^{14}C sample in a contemporary layer to ca. 2880–2580 Cal BC (2σ).⁷Pittman (2012: 81) posited that this sealing “... is remarkably important for our understanding of the relationship during the first half of the third millennium between the Halil River valley and southern Mesopotamia”.

In fact, “city seals” in Mesopotamia are considered tokens and media of institutional authority conferred by formal alliances or confederations of city-states, probably for specific joint projects (Matthews 1993; Mander 2007). As the sealing of Konar Sandal South was used on a door, and not on a movable item that could be shipped, it may have belonged to a diplomat from a coalition of Sumerian cities who was acting at Marhaši and had the authority to monitor the storage and distribution of unidentified goods within a room. Although the evidence is limited, it would demonstrate that an early phase of aggressions and retaliations between Mesopotamia and its immediate eastern highland neighbors also involved the active search for political support from the Marhašians. As “the enemy of my enemy is my friend”, they could potentially threaten the “Elamite” enemies from the east.

[Table 14.1](#) then shows a second contingency or historical cycle of the same nature. After a first phase of intense militaristic aggression by Sargon and Rimush against the eastern polities, from the late period of Naram-Sin and Shar-kali-sharri's reign when threats from east became more and more serious, first an unnamed royal house at Susa (with Naram-Sin's treatise: Álvarez-Mon 2013: 220), then Marhaši – which had formerly grown to the extent of being perceived as an evil entity that had planted its roots in Elam – returned as potentially crucial partners. The support of this powerful polity was then cultivated by the means of dynastic marriages, as well as by a growing exchange of messengers, diplomats and mercenaries. As the last section of this chapter will argue, the evolution of the iconography of seals from the early to the late Akkadian period even shows a changing attitude towards public symbols of “Meluhha” (whatever was meant exactly by this term) used at the highest levels of administration.

What we can reconstruct of the foreign eastern politics of the Ur III state when “... embassies came and went, and interdynastic marriages were arranged in times that also witnessed brutal attacks on highland regions ... against the recalcitrant east” (D. T. Potts 1999: 139) suggests that the last heavily centralized “empire” of Mesopotamia had followed, to a large extent, the strategies of the last Akkadian kings – with the same, perhaps inevitable, disastrous results.

If these historical trends on the whole seem well defined, the course of events behind the “Elamite” territories controlled by the enemies of the kings of Agade and Ur are totally unknown. The Domino tesserae had suddenly shifted orientation. Did the “allies” of Marhaši and other eastern groups provide any military help when Lullubum, Gutium and the Simaškians invaded Mesopotamia? Did any conflict outburst at the eastern gates of “Elam”? And if this happened, in which form and how long did it last?

The eastern frontier of Elam – Bronze Age eastern Fars, from the eastern Zagros and the Marv Dasht plains to the Halil Rud basin, with the valleys of Fasa, Darab and Forg – is still largely unexplored, while the local discontinuity of urban life poses difficult questions (McCall 2013). In the valleys of Faza and Darab, preliminary archaeological sequences suggest a settlement gap between the mid-3rd millennium BC and the centuries of early Akkadian pressure (de Miroschedji 1972, 1974; Desset 2016b).

A similar break – the transitional phase between the Banesh and Kaftari phases (Sumner 2003) – occurred at Tall-i Malyan, with the interruption of urban life at Anshan before the reappraisal of the Kaftari period, and at Konar Sandal South, where a dense urban network and the first citadel were abandoned sometime between the 25th and the late 23rd centuries BC – somewhat early but perhaps not too early for a possible synchronism with Sargon’s or Rimush’s attacks (although the citadel of Konar Sandal South was later rebuilt and the urban core might have shifted further north: there are no published data on the settlement layout, its hinterland and their changes in the course of time).

In [Table 14.2](#), a series of early urban centres (vertical column at left) are listed from the south-western edge of the Plateau, ancient Elam, to the Indus. Crucial interacting settlement areas and centers of power appear on the horizontal axis: Susa, the Konar Sandal site complex of ancient Marhaši, the Oxus sites of the Bactro-Margiana areas and the Indus valley with its western borders and sphere of influence in Baluchistan.⁸

Considering [Table 14.1](#) alongside [Table 14.2](#), the most serious mismatch is the absence of a clear historical identity for the Oxus civilization. Identified by Steinkeller as Tukrish (an obscure north-eastern country mentioned in Mesopotamia mostly in the first two centuries of the 2nd millennium BC),⁹ by Francfort and Tremblay (2010) as Marhaši itself, and by D. T. Potts (1999) as Simaški, the Oxus is as unsubstantial in historical terms as it is prominent in its archaeological evidence. In this chapter, I accept Steinkeller’s identification of the Halil Rud civilization with Marhaši, but it is clear that if Steinkeller is wrong, the whole picture would

radically change under the weight of the historical evidence.

The three most complex columns of [Table 14.2](#) involve:

- (1) the establishment of the activities of Indus traders and probably of their family enterprises for generations in foreign contexts. Such activities are well attested by the flow of a long list of precious goods and by the invention of hybrid or transformed seals mixing Indus and local traits, most probably expressing local languages and identity rules (besides Mesopotamia, almost certainly at Susa, in the Halil Rud valley and in the centers of the Oxus civilization);
- (2) the identification of the Kerman region and the Halil Rud valley settlements as the origins of the alabaster vessels inscribed by Akkadian kings (more than 130 found in Mesopotamia) and of the carved chlorite vessels of the *séries ancienne*, and the well-known enormous distribution of the latter from the Indus to Transoxania and Syria (T. F. Potts 1994: Figure 5; de Miroschedji 1973). While the alabaster vessels inscribed by Rimush are a perfect witness to his eastern pressures and expeditions, the abundance of various styles of carved chlorite vessels at Susa, even in the absence of precise stratigraphic information, let us imagine a complicated history of intensive and variable exchanges, and perhaps a certain cultural permeability, between Khuzistan and Kerman in the second half of the 3rd millennium BC;^{[10](#)}
- (3) and the impressive diffusion, between (broadly speaking) 2100 and 1800 BC, of many important goods, including stone statues, seals, ornaments, and ritual objects among which are the miniature columns and other symbols of status from the Oxus to north-eastern Iran, Susa, Anshan, Kerman, the Persian Gulf, Baluchistan and (in part) to the Indus valley.^{[11](#)}

The adoption of Oxus-related images, symbols and presumably formal Oxus court garments at the Anshanite court of the Sukkalmah period, and possibly the use of Linear Elamite writing might be part of the same wider picture. Linear Elamite is conventionally ascribed to the reign and court of Puzur-Inshushinak, even if this writing system was probably used before and after his career, and there is no certainty of its actual invention at Susa (for Linear Elamite see Desset, Chapter 20 in this volume).^{[12](#)} According to the system of correlations discussed in D. T. Potts (2008a), the spread of this writing system might be somehow linked to a phase of strong cultural (and probably political) expansion of the early Oxus state(s) towards south, south-east and south-west.

Potts' proposed correlation between the appearance of these important symbols and materials with the advent of the Simaškian confederation that permeated or occupied Anshan and Susa and eventually destroyed Ur might make, at first sight, historical sense. However, it is clear that writing, symbols and objects prominent in the culture of the Oxus core areas

might have been so prestigious between the Elamite highlands and the upper Zagros that they were adopted, once more with a Domino effect, by the Simaškians and other more eastern groups of the Plateau. The notion of the faraway Oxus polities might have been thus shadowed to the west, emerging slowly while the highland cultural identities slowly coalesced in the centuries of the Sukkalmah period.

The impact of the Halil Rud valley/Marhaši centers, at present, is understood mainly in historical terms, and archaeologically only after the very specific window of the spread of the carved chlorite vessels, while the Oxus remains a complicated body of archaeological macro-evidence with still questionable historic correlates. This makes it difficult to combine specific information in the same scenarios.

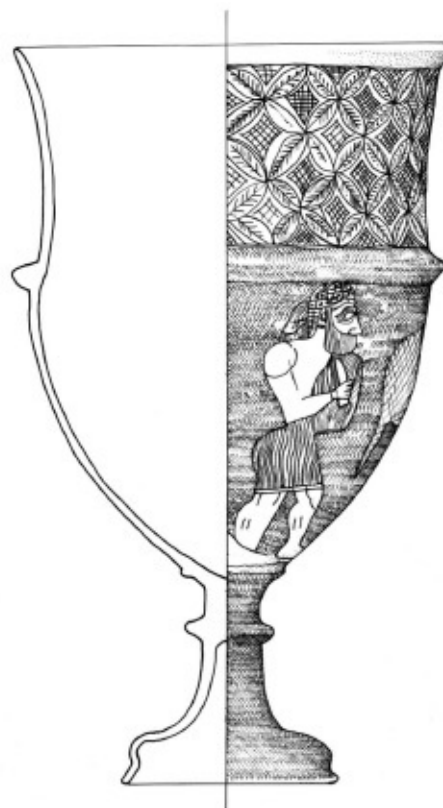
However, all this suggests that in the second half of the 3rd millennium BC the spheres of influence of these two polities had grown considerably, eventually affecting in depth the geopolitical interactions of the eastern Iranian Plateau. A new silver vessel of unknown provenience, but stylistically ascribed to the court art of the Oxus speaks of an armed conflict between these two regional powers.

A new Oxus silver vessel, and its historical implications

This incised pedestalled goblet ([Figs. 14.2](#) and [14.3](#)), made of silver (ca. 90–92% silver, 3.5% copper, 1.5% gold, and minor impurities¹³), belongs in a private collection and has been only recently published (Vidale 2017: 66–74). A band of circles intersecting in fine leaves with inner nervures on the upper part of the goblet is of obvious Indus inspiration.¹⁴ Below, it shows a cortege scene in which six individuals carry a captive prisoner. The goblet is 16 cm high, 9.6 cm at the mouth; the foot diameter is 4.6 cm. It weighs 159 g.



[Figure 14.2 A silver goblet chased in the “Bactrian” style, in a private collection, showing a cortege escorting a handcuffed prisoner \(photograph V. Ricciardi\).](#)



[Figure 14.3 A drawing of the same silver goblet, with a rendering of the main pattern \(M. Vidale\).](#)

As far as the form is concerned, pedestalled goblets occur in the ceramics of Gonur (Rossi-Osmida 2002: 136, Type 3, possibly linked to the wheel-made goblets of the cenotaphs in MR 1, period VIII, South cemetery – see Santoni 1984: Figure 8.1.3; Jarrige 1987, Abb. 77; Jarrige et al. 1995: Figure 7. 27, b and c), approximately dated between 2100 and 1900 BC (see also the *coupe profonde à pied* in Amiet 1977: 95, Figure 4).

From a stylistic viewpoint, its figuration closely recalls a well-known series of “Bactrian” silver beakers with narrative figurations: the banquet beaker in Francfort 2005 (Figure 6 a-d; private collection), the *gobelet à la bataille* (Francfort 2005: Figure 7a-i, private collection), the

gobelet à la chasse (Francfort 2005: Figure 22, at the Metropolitan Museum, New York), the *gobelet à la procession* (Francfort 2005: Figure 25a-b, at the Louvre) and the *gobelet au labour et au banquet* (Francfort 2005: Figure 26a-c, at the Miho Museum), all unfortunately coming from plundered graves and the antiques market.

The narrative band shows, from right to left, a bare-chested character with hair falling on the neck, beard and a long, decorated gown. He carries a torch or possibly a stone sceptre. He is followed by another bearded personage, badly preserved, carrying unidentified objects; then another bare-chested person with a plain kilt, carrying a weapon with a round protruding blade. The right hand holds one of the enigmatic objects that look like animal tails and sometimes hang from other objects in Bactrian art. On the back, he carries a large bulging container with a pending lap (a “wineskin”), while another round, compact package seems to hang from the belt. The head of the fourth individual is covered by what looks like a helmet with a bun at the rear, like Meskalamdug’s gold helmet in the Royal Cemetery of Ur. He holds a knife (perhaps for executing the prisoner) and wears a tunic dress that leaves a shoulder naked; the garment might be covered by tufts similar to those of the Mesopotamian and Oxus traditions. The next personage carries another “wineskin”, from which hangs another object resembling an animal tail.

The sixth person is portrayed with completely different features: long hair, a vertical braid on the shoulder, a long, pointed beard and a cross-hatched kilt that opens in front like an inverted “V”. He is handcuffed, the hands bent at the back and blocked by bars with round weights at the extremities, and shows wounds on the shoulder and on the lower leg. While the pointed beard recalls two male statuettes possibly coming from south-eastern Iran of the second half of the 3rd millennium BC (for example, Francfort 2012: Figure 1a-e; and Freeman 2013: no. 10), the vertical braid and the kilt open in front also appears on some human figures on the carved chlorite vessels of the Marhaši tradition (for example, in the famous chlorite bowl reportedly found at Khafajah, now at the British Museum – see Aruz 2003: 330–332, no. 227). All features – braid, beard and kilt – characterize the man as a foreigner, most probably a vanquished chief from Marhaši. The prisoner is bound and marched on by a guard that closes the cortege.

This vessel documents that during ca. 2300–2100 BC, the Oxus polity had clashed with the expansionism of Marhaši: this latter at the time powerful enough to represent a threat both for Akkad and for its northern neighbors. This is why at the time prisoners from Marhaši were portrayed with pride both on early Akkadian¹⁵ and Oxus propaganda court art. At least in the form of raids for booty, military expeditions on land routes could leave from Bactria and Margiana and cross the Iranian Plateau for hundreds, if not more than a thousand kilometers. Salvatori (1995) identified Shahdad on the north-western edge of the Dasht-i Lut, as an Oxus *karum*, a trade outpost of the Oxus polity; he ascribes the similarities between the copper artifacts of the Lut and those of Bactria and Margiana to interaction among traders and

craftsmen of the two macro-regions. The clash or clashes for control of the local north-south trade routes along which important copper outcrops could be mined, clashes in which the warriors from Marhaši were defeated, might have taken place not far from Shahdad. Soon after 2300 BC the eastern, probably loose frontier of the Elamite world might have been threatened by the expansionist pressure of two super-powers, one from the north (the Oxus), the other from east (Marhaši). Judging by the apparent cultural penetration of northern traits at Anshan and Susa at the time of the Sukkalmahs, the Elamite houses, from a historical viewpoint, sought the alliance and support of the Oxus chiefs, while the kings of Sumer and Akkad tried to maintain close links with the royal house of Marhaši.

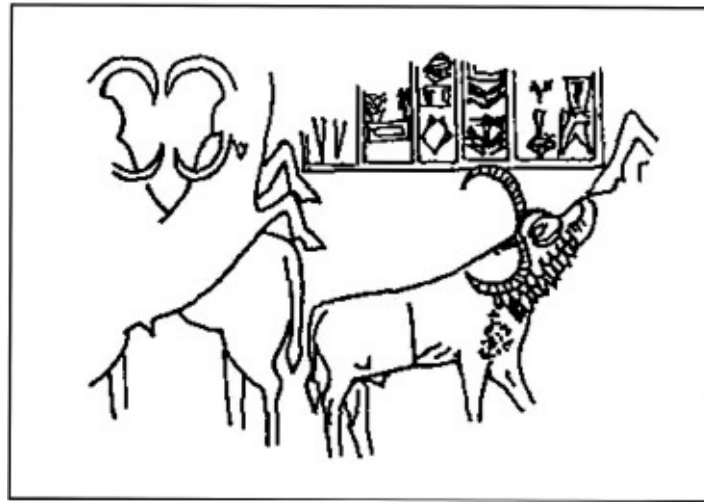
Bad buffaloes vs. good buffaloes

This last section considers the possibility that at the Akkadian courts, “... internal mechanisms were developed through the seal cutting workshops to articulate and disseminate clear political messages” (Buccellati and Kelly-Buccellati 2002: 17). It seems that selected animal icons featuring on official seals, depending on the prevailing attitudes towards the eastern polities, could change radically according to specific contingencies and short-term political requirements, through coherent, repetitive transformations. In fact, “... It is possible that the lion in the southern contest scenes could represent the north. An extension of this idea would be that the water buffalo represents the south-east. If these hypotheses are valid, we could then interpret the contest scene in the Akkadian period as one of the visual forms used by the dynasty to represent their domination (or projected domination) over these two geographical areas” (Buccellati and Kelly-Buccellati 2002: fn. 2).

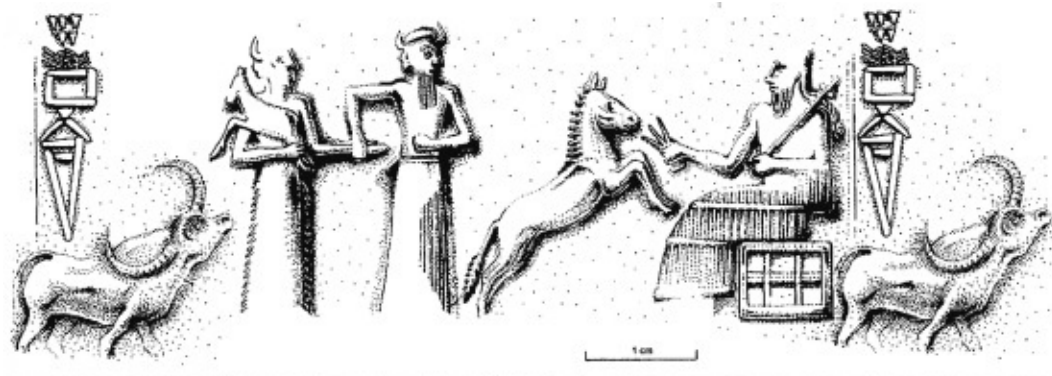
The basis of such inference is the frequency in the long inventory of *Tierkampfszenen* or animal contests of the Akkadian period, of animated fights in which curly-haired *lahmu* heroes defeat lions and water buffaloes,¹⁶ which might allude to the prolonged expansionist efforts of Sargon and his sons towards the upper and lower seas. Many scenes have a violent emphasis: water buffaloes are lifted by the hind leg, or the heroes place their feet on the animal's neck, or their tails are broken off (e.g. Porada 1968: Pl. IIID). The conveyed meanings are overpowering, tearing apart, butchering. Sometimes buffaloes are attacked by lions, suggesting – in light of the above interpretation – that the bearers of the seals in some contingencies might also identify themselves as northerners (an example in Figure 14.7).

While I fully agree with the idea that the water buffalo might have represented the east, I also believe that in the same repertories (Boehmer 1965: Taf. VI-XXI; Ziffer 2014 and others), for the middle and late Akkadian periods, explicit reference was made to the Indus valley or to communities of Indus origin settled along the Persian Gulf.¹⁷ However, in the course of time, even within the time span of the Akkadian empire, buffaloes were not invariably

depicted as overpowered wild creatures. In a sealing of Sargon's daughter found at Ur ([Figure 14.4](#), from Boehmer 1965: Taf. XI, 114a) a buffalo appears in a peaceful attitude below the inscription (a place usually reserved for good animals fed by gods, see Buccellati and Kelly Buccellati 2002: 24) clearly carved after well-known Indus models – a very rare icon, judging by Boehmer's repertory. The inscription reads "... -kikudu, the scribe, [is her servant]" (Collon 1987: no. 908).



[Figure 14.4](#) Drawing of the partial impression of a cylinder belonging to Enheduanna, daughter of Sargon, found at Ur (from [Boehmer 1965: Tafel XI, 114a](#)).



[Figure 14.5](#) Drawing of the impression of a cylinder seal belonging to Ishar-Beli, an officer of Tar'am-Agade, daughter of Naram-Sin, found at Urkesh (from Buccellati and Kelly-Buccellati 2002: Figure 5).

Does this seal reflect a different view of the Indus communities, while commercial interests and prestige made Sargon very proud of having Meluhha's ships docked at Agade's piers? This shifting view of the easterners perhaps did not necessarily depend upon political vagaries over time; perhaps the Akkadian court made special cylinders that might be used whenever it had to present itself to the foreigners in a more positive light. If the official dynastic seals of the sons and daughters of Naram-Sin were still bound to the contest scenes (Tar'am-Agade's seal at Urkesh, see Buccellati and Kelly-Buccellati 2002: Figure 2; Ukin-Ulmash's seal in

Boehmer 1965: Figure 256 and Ziffer 2014: Abb. 2), the icon of the “good buffalo” surprisingly reappears with no changes in the seal impression of Ishar-Beli, probably a high officer of Tar’am Agade, always at Urkesh and always below the inscription ([Figure 14.5](#)). In this seal, a divine presentation scene in which a god leads another god before a third enthroned divinity. The latter seems to feed a prancing equid (a mare of onager or a hybrid, according to the Buccellatis), while the introduced god carries her colt, apparently under the gaze of the “good buffalo”. In this seal, the north (the steppes) might be represented by the equids, while the south/south east would be symbolized by the buffalo. Recognizable wild asses are extremely rare, if not absent, in Akkadian seal iconography, so the idea that the equids in Ishar-Beli’s seal were horses might be equally plausible.

Eventually a totally new emphasis is recognizable in the famous seal of Shar-kali-sharri’s scribe (ex Collection Le Lerque) at the Louvre, whose impression appears in Figure 14.6 (Boehmer 1965: no. 724, Figure 232; Amiet 1973: no. 231; Collon 1987: no. 529; Aruz 2003: no. 135, 208–209; Demange 2016, with further references). The symmetric composition, centered on the box with the inscription (“Divine Shar-kali-sharri, king of Akkad, Ibni-sharrum, the scribe, his servant”) is dominated by two majestic “good buffaloes” drinking the water of the double streams springing from the pots of two *lahmu* heroes. The name of the scribe – “The king created (him)” – is referential and stresses the strict institutional link with the throne that conferred authority to the scribe. The inversion with the animal contest scenes is total, and whoever is familiar with the (comparatively rare) images of water buffaloes in Indus stamps can easily perceive that the skilled carver of this beautiful seal had an advanced familiarity with the original Indus models.

The inference is that the king’s personal scribe had specific, officially recognized links with the Indus communities, but whether in the Persian Gulf or further east is impossible to state. This conclusion is strengthened by the unusual wavy band that runs along the base of the seal, clearly representing a single large river flanked by two parallel chains of mountains. As the twin streams in Mesopotamian art usually refer to the Tigris and Euphrates, the placing of this river valley below the central composition and the “good buffaloes” unescapably points, again, to the Indus – perhaps indirectly suggesting that the two Mesopotamian rivers and the Indus had the same origin in the *abzu*. It could hardly be by chance that Shar-kali-sharri’s reign (see [Table 14.1](#)) was plagued by a growing hostility and warfare with the nearby Elamite and Zagros area, and that in the same years the king sought the support of Marhaši through high-level interdynastic marriages.



[Figure 14.6 3D rendering of the impression of the cylinder of Ibni-Sharrum, scribe of king Shar-kali-sharri \(modified from Cignoni 2009\).](#)



[Figure 14.7 Drawing of the impression of a cylinder seal of a scribe of Gudea \(modified from Porada 1968: cover, Pl. IIa\).](#)

But if, again, “the enemy of my enemy is my friend”, he could also eventually turn again into a dangerous enemy. A late example of a contest scene in which two heroes overwhelm a “bad buffalo” in the old, codified iconographic scheme is a serpentine cylinder ascribed to the court of Gudea, bearing the inscription “Gudea, *ensi* of Lagash, Ur-Bau the scribe (is) your servant” (Porada 1968: 140–144, Pl. IIa) ([Figure 14.7](#)).

We are still very far from understanding not only the details but also the historical core of many crucial interactions of the late 3rd millennium BC and the following two centuries. In particular, what precisely happened between the eastern “Elamite” frontier, the Indus groups of interest in the Persian Gulf and Marhaši in the wider framework of the Mesopotamian pressure is still largely obscure. The southern fringe of the Iranian Plateau and the coasts of the Persian Gulf are practically unexcavated, as Baluchistan is. Reconstructing the “Great Domino games” will take a lot of time, much discussion and, even a bit of good luck.

Acknowledgements

My warmest thanks are due to my colleagues Gianni Marchesi, Sandro Salvatori, Dennys Frenez, François Desset, Richard Meadow, who gave me substantial support and quite

valuable criticism while writing this chapter.

Notes

- ¹ The term Elam is here used according to the conventional understanding, although its correctness for a great part of the 3rd millennium BC, in historical terms, is currently questioned (Desset 2016a).
- ² The archaeology of ancient Mesopotamia still makes a limited use of the natural and material “hard” sciences for identifying specific aspects of the rural and urban economies. Or perhaps, better stated: it does not implement the analytical research strategies that matching textual information would optimize.
- ³ The lapis lazuli blocks of Ebla show the common light-colored inner layering of diopside that helped reduction but had to be removed as far as possible while reducing the stone into high-quality lapis ornaments.
- ⁴ But see Cleuziou and Tosi 2000 and Frenez 2011. No wreck of the 3rd millennium BC has been so far identified on accessible sea bottoms of this sea route.
- ⁵ For example, Brown (2009), building on the classical definitions of Trigger (2003), and indirectly through the latter on Childe (1950) (where the concepts of city and urban revolution are deeply embedded in that of civilization) pragmatically circumscribes the basic features of civilization to surplus food, density of population, stratified social ranks, coerced tribute, state systems and accumulated learning (discussion in Abdi 2003: 140–142). We may wonder, at this point, whether in all early settlements where the PE information technology was temporarily active there is sound evidence of a comparable social complexity and formalized hierarchy. Certainly “accumulated learning” was not always there, or in the long run it did not work effectively, if PE writing systems disappeared two or three centuries (?) after their early use and specialized teaching.
- ⁶ In middle chronologies, at present, it is generally accepted that Puzur-Inshushinak lived at the end of the 22nd century BC, being a contemporary of Ur-nammak and Gudea; part of the Linear Elamite inscriptions so far known might be older, even by 2–3 centuries (*contra* Dahl 2013), but their dating at present cannot be established in detail (Potts 1999: 122–129; Desset 2014).
- ⁷ Later sealings with Early Dynastic IIIa–IIIb combat scenes show that contacts with Sumerian traders continued without gaps in the following centuries (Madjidzadeh and Pittman 2008: Figure 31).
- ⁸ Pottery comparisons are not included because of their intrinsic ambiguity and as they cannot be compared with elite products; nor are considered some classes of material culture whose provenience and typological variations in space and time are still poorly understood (like, for example, manifold types of alabaster vases, possibly manufactured in various regions, from south-eastern Iran to Sistan and the Elburz, or the conical cosmetic holders found at Shahr-e Sokhta, Mundigak, Altyn Depe and other contemporary sites of the Turanian macro-region, whose productions areas are unknown, Vidale et al. 2016b).
- ⁹ Steinkeller’s arguments are the mention, in written sources of the 18th century BC, of goods like lapis lazuli, gold containers with bull caps and gold pendants inlaid with carnelian and lapis, some of which are in the shape of eagles (Steinkeller 2008). These objects seem to fit rather well with some of the grave goods unearthed at Gonur by Viktor Sarianidi. Interestingly, one text mentioned by Steinkeller refers to “the kings” of Tukrish, and this also fits with the

general archaeological picture of the evolution of the Murghab “khanates”, distinguished by a phase of evident political fragmentation in the later settlement phases (Salvatori 2008).

- [10](#) The carved chlorite vessels found at Susa were not marked with Akkadian dedicatory inscriptions, perhaps suggesting that at Susa they did not have the exceptional character they assumed in Mesopotamia where “... the “intercultural style” vessels were merely exotica with bizzare and meaningless decorations” (Marchesi 2016: 102).
- [11](#) The partiality of previous reconstructions can be easily recognized considering that two of the main actors (the Oxus and Marhaši) had been part of the archaeological scenarios since no more than 20 or 25 years beforehand, and that the multiplicity of Indus trading interests along the Persian Gulf was an equally recent acquisition.
- [12](#) See above, note 6.
- [13](#) Preliminary analysis by G. Guida and M. Vidale at ISCR, Rome, made with a with a Portable XRF system X-Met 8000 Oxford Instruments, tube rating 4W, 50 Kv 80 µA, on the object not cleaned.
- [14](#) To be compared with the same design on a globular metal vessel of the Asterabad treasure (Rostovzeff 1920). A similar band runs below the edge of a silver cup from Grave 3235 at Gonur (Morello 2015, cat. 19, p. 147).
- [15](#) Louvre AO 5683, Acquisition 1912, Département des Antiquités orientales: a steatite vase fragment with a nude vanquished prince, fettered, drawn by a nose ring; reportedly found at Uruk. See Collon 1996: Figure 13a. Note the pointed beard and the vertical braid, unmistakable ethnic markers of the prisoner’s provenience from Marhaši (Vidale 2015).
- [16](#) According to Richard Meadow, 3rd millennium seal iconography alone does not allow one to really know the domestic/wild status of water buffaloes in the depictions, although there are osteological indications that there were domestic buffalo by the Harappan Period in the Indus basin, and both forms may have been found in the same contexts. Furthermore, “... Whether these indicate the presence of actual animals in Mesopotamia in the Akkadian period or not is an open question. I have not kept close tabs on the more recent studies of faunal remains from sites in Mesopotamia, so I cannot give you an authoritative statement, although previous reports of horns of water buffalo seem to be questionable. It is entirely possible that water buffalo did not reach Mesopotamia and the Levant in any numbers until sometime in the first millennium BC” (personal communication to me, D. Frenez and G. Marchesi; see Patel and Meadow 1998). However, the general context of the animal fights scenes in Akkadian seals, where water buffaloes are quite frequent, and a good common sense suggests that these big bovids with powerful crescent horns attacked by Mesopotamian *lahmus* were the Arni (*Bubalus arnee*) and were considered as untamed, dangerous beings from a foreign world, rather than “peaceful cows”. The general opinion, in fact, is that the introduction of the Asiatic water buffalo in Iraq in the domesticated form *Bubalus bubalis* dates back to the Sasanian (Demange 2016) or medieval periods (Abid and Fazaa 2007).
- [17](#) The references to the Indus sphere of influence may also have included the Indian bison or *gaur* (Vidale 2004, 2005), but this is another line of research.

References

Abdi, K. 2003. From écriture to civilization. Changing Paradigms of Proto-Elamite Archaeology. In: Miller, N.E. and Abdi, K.

- (eds.) *Yeki bud, yeki nabud, essays on the archaeology of Iran in honor of William M. Sumner*. Los Angeles: The Cotsen Institute of Archaeology, University of California, 140–151.
- Abid, H.S. and Fazaa, N.A. 2007. *Status Report. Water Buffalo in the Iraqi Marshes. Thi Qar and Missan Governorates*. Nature Iraq Office, Sulaimani, Kurdistan, Iraq. Accessed on January 2016 at the site www.natureiraq.org/uploads/9/2/7/0/9270858/status_report_buffalothiqr.pdf.
- Algaze, G. 1989. The Uruk Expansion: Cross-Cultural Exchange in Early Mesopotamian Civilization. *Current Anthropology* 30: 571–608.
- . 1993. *The Uruk World System*. Chicago: University of Chicago Press.
- Álvarez-Mon, J. 2013. Khuzestan in the Bronze age. In: Potts, D.T. (ed.) *The Oxford Handbook Ancient Iran*. Oxford: Oxford University Press, 217–232.
- Amiet, P. 1973. *Bas-reliefs imaginaires de l'ancien Orient d'après les cachets et les sceaux-cylindres*. Paris: Hôtel de la Monnaie, Imprimerie National.
- . 1977. Bactriane Protohistorique. *Syria* 54/1–2: 89–121.
- . 1986. *L'âge des échanges inter-iraniens 3500–1700 avant J.-C.* Paris: Éditions de la Réunion des musées nationaux.
- . 2007. L'âge des échanges inter-iraniens. In: Ligabue, G. and Rossi-Osmida, G. (eds.) *Sulla Via delle Oasi: Tesori dell'Oriente Antico*. Trebaseleghe: Il Punto edizioni, 64–87.
- Aruz, J. (ed.) 2003. *Art of the First Cities: The Third Millennium B.C. from the Mediterranean to the Indus*. New York: The Metropolitan Museum of Art.
- Ascalone, E. 2006. *Archeologia dell'Iran Antico. Interazioni, integrazioni e discontinuità nell'Iran del III Millennio a.C.* Messina: Di.Sc.A.M.
- Baghestani, S. 1997. *Metallene Compartimentsiegel aus Ost-Iran, Zentralasien und Nord-China*, Archäologie in Iran und Turan 1. Rahden, Westfalen: M. Leidorf.
- Boehmer, R.M. 1965. *Die Entwicklung der Glyptik während der Akkad-Zeit*. Berlin: Walter de Gruyter.
- Brown, C.S. 2009. What Is a Civilization, Anyway? *World History Connected*, October 2009, <<http://worldhistoryconnected.press.illinois.edu/6.3/brown.html>>, accessed February 2016.
- Buccellati, G. and Kelly-Buccellati, M. 2002. Tar'am-Agade, Daughter of Naram-Sin, at Urkesh. In: Al-Gailani Werr, L., Curtis, J., Martin, H., McMahon, A., Oates, J. and Reade, J. (eds.) *Of Pots and Plans. Papers on the Archaeology and History of Mesopotamia and Syria Presented to David Oates in Honour of His 75th Birthday*. London: Nabu Publications, 11–31.
- Carter, E. 1998. Elam, ii. The Archaeology of Elam. In: Yarshater, E. (ed.) *Encyclopædia Iranica* 8. Costa Mesa, California: Mazda Publishers, 314–325.
- Carter, E. and Stolper, M.W. 1984. *Elam. Surveys of Political History and Archaeology*, Near Eastern Studies 25. Berkeley – Los Angeles – London: University of California Press.
- Chakrabarti, D.K. 1990. *The External Trade of the Indus Civilization*. New Delhi: Munshiram Manoharlal.
- Childe, V.G. 1950. The Urban Revolution. *Town Planning Review* 21: 3–17.
- Cignoni, P. 2009. 3D scanning and unrolling an ancient seal, <<http://meshlabstuff.blogspot.it/2009/11/3d-scanning-and-unrolling-ancient-seal.html>>.

- Cleuziou, S. and Tosi, M. 2000. Ra'sal-Jinz and the Prehistoric Coastal Cultures of the Ja'alan. *Journal of Oman Studies* 11: 19–73.
- Collon, D. 1987. *First Impressions. Cylinder seals in the Ancient Near-East*. London: British Museum Publications.
- . 1996. Mesopotamia and the Indus: The Evidence of the Seals. In: Reade, J. and Kegan, P. (eds.) *The Indian Ocean in Antiquity*. London – New York: International, 209–225.
- Cortesi, E., Tosi, M., Lazzari, A. and Vidale, M. 2008. Cultural Relationships Beyond the Iranian Plateau: the Helmand Civilization, Baluchistan and the Indus Valley in the 3rd Millennium BCE. *Paléorient* 34/2: 5–35.
- Dahl, J. 2013. Early Writing in Iran. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press, 233–262.
- Dahl, J., Petrie, C.A. and Potts, D.T. 2013. Chronological parameters of the earliest writing system in Iran. In: Petrie, C.A. (ed.) *Ancient Iran and Its Neighbours. Local developments and long-range interactions in the fourth millennium BC*, The British Institute of Persian Studies, Archaeological Monographs Series 3. Oxford – Oakville: Oxbow Books, 353–378.
- Damerow, P. and Englund, R.K. 1989. *The Proto-Elamite Texts from Tepe Yahya*, American School of Prehistoric Research, Peabody Museum, Bulletin 39. Cambridge, Massachusetts: Harvard University Press, Peabody Museum of Archaeology and Ethnology.
- Demange, F. 2016. *Cylinder Seal of Ibni-Sharrum*, www.louvre.fr/en/oeuvre-notices/cylinder-seal-ibni-sharrum, accessed January 2016. Paris: Louvre Museum.
- Desset, F. 2012. *Premières Écritures Iranienues. Les systèmes Proto-Élamite et Élamite Linéaire*, Series Minor 76. Napoli: Università degli Studi di Napoli “L’Orientale”, Dipartimento Asia Africa Mediterraneo.
- . 2014. A New Writing System Discovered in 3rd Millennium BCE Iran: The Konar Sandal “geometric” Tablets. *Iranica Antiqua* 49: 83–109.
- . 2016a. Here ends the history of Elam: toponymy, linguistics and cultural identity in Susa and south-western Iran, ca. 2400-1800 BC, https://www.academia.edu/7391723/Here_ends_the_history_of_Elam_toponymy_linguistics_and_cultural_identity_in_Southwestern_Iran_ca._2400-1800_BC, accessed January 2016.
- . 2016b. *Between Anshan and Marhashi: Archaeological Investigations in a Political and Cultural Border Area: The Eastern Fars (Plains of Fasa, Darab and Forg) between 4000 and 1500 BC*. Unpublished research proposal.
- Englund, R.K. 1996. The Proto-Elamite Script. In: Daniels, P.T. and Bright, W. (eds.) *The World's Writing Systems*. New York – Oxford: Oxford University Press, 160–164.
- Francfort, H.-P. 2005. Observations sur la toreutique de la civilisation de l'Oxus. In: Bopearachchi, O. and Boussac, M.-F. (eds.) *Afghanistan Ancient Carrefour entre l'Est et l'Ouest*, Indicopleustoi 3. Turnhout: Brepols, 21–63.
- . 2012. Une Statuette de Bronze Protohistorique du Musée National de Kaboul Provenant du Nord de l'Afghanistan. In: Lefèvre, V. (ed.) *Orientalismes. De l'archéologie au musée. Mélanges offerts à Jean-François Jarrige*. Turnhout: Brepols, 213–226.
- Francfort, H.-P. and Tremblay, X. 2010. Marhaši et la civilisation de l'Oxus. *Iranica Antiqua* 45: 51–224.
- Franke, U. 2010. From the Oxus to the Indus: Two Compartmented Seals from Mohenjo-daro (Pakistan). In: Parpola, A., Pande, B.M. and Koskikallio, P. (eds.) *Corpus of Indus Seals and Inscriptions. 3.1. Supplement to Mohenjo-daro and*

- Harappa*. Helsinki: Suomalainen Tiedeakatemia, xvii – xliii.
- Freeman, D. (ed.) 2013. *Splendors of the Ancient East. Antiquities from the al-Sabah Collection*. London: Thames and Hudson.
- Frenez, D. 2011. *La Civiltà dell'Indo fuori Meluhha: Ruolo ed obiettivi degli Harappani nella sfera di interazione culturale dell'Asia Media*, unpublished doctoral dissertation. University of Bologna.
- Hakemi, A. 1997. *Shahdad. Archaeological Excavations of a Bronze Age Center in Iran*. Rome: IsMEO.
- Heydari, M., Fazeli Nashli, H., Cortesi, E. and Vidale, M. 2015. A surface collection at Chegerdak, a Bronze Age centre in the Jazmurian basin (South-Eastern Iran). *Paléorient* 41/2: 133–155.
- Hildreth, P. and Kimble, C. (eds.) 2004. *Knowledge Networks: Innovation through Communities of Practice*. Hershey, PA – London: Idea Group Publishing.
- Jarrige, C., Jarrige, J.-F., Meadow, R.H. and Quivron, G. (eds.) 1995. *Mehrgarh Field Reports 1975 to 1985. From the Neolithic to the Indus Civilization*. Karachi: Department of Culture and Tourism, Government of Sindh, Pakistan, in collaboration with the French Ministry of Foreign Affairs, Karachi.
- Jarrige, J.-F. 1987. Der Kulturkomplex von Mehrgarh (Periode VIII) und Sibri. Der “ Schatz ” von Quetta. In: *Vergessene Städte am Indus*. Mainz am Rhein: Verlag Philipp von Zabern, 102–111.
- Kaniuth, K. 2010. Long Distance Imports in the Bronze Age of Southern Central Asia. Recent Finds and Their Implications for Chronology and Trade. *Archäologische Mitteilungen aus Iran und Turan* 42: 3–22.
- Kenoyer, J.M. 1991. The Indus Valley Tradition of Pakistan and Western India. *Journal of World Prehistory* 5/4: 331–385.
- . 2008. Indus and Mesopotamian Trade Networks: New Insights from Shell and Carnelian Artifacts. In: Olijdam, E. and Spoor, R.H. (eds.) *Intercultural Relations between South and Southwest Asia. Studies in commemoration of E.C.L. During-Caspers (1934–1996)*, BAR International Series 1826 = Society for Arabian Studies Monographs 7. Oxford: Archaeopress, 19–28.
- Kohl, P.L. 1975. Carved Chlorite Vessels: A Trade in Finished Commodities in the Mid-Third Millennium. *Expedition* (Fall 1975): 18–31.
- . 1977. A Note on Chlorite Artefacts from Shahr-i Sokhta. *East and West* 27: 111–127.
- . 1984. *Central Asia. From Beginnings to Iron Age. L'Asie Centrale des origines à l'Âge du Fer*. Paris: Éditions Recherche sur les Civilisations.
- Kohring, S. 2012. Conceptual knowledge as technologically materialised: a case study of pottery production, consumption and community practice. In: Stig Sørensen, M.L. and Rebay-Salisbury, K. (eds.) *Embodied Knowledge. Perspectives on Belief and Technology*. Oxford: Oxbow Books, 106–117.
- Lamberg-Karlovsky, C.C. 1970. *Excavations at Tepe Yahya, Iran 1967–1969. Progress Report I*, American School of Prehistoric Research, Peabody Museum, Bulletin 27. Cambridge, Massachusetts: Harvard University Press, Peabody Museum of Archaeology and Ethnology.
- . 1988. The ‘Intercultural Style’ Carved Vessels. *Iranica Antiqua* 23: 45–95.
- Law, R. 2011. *Inter-Regional Interaction and Urbanism in the Ancient Indus Valley*, vols. 1 and 2. New Delhi: Manohar Books.
- Ligabue, G. and Salvatori, S. (eds.) 1988. *Battriana, una antica civiltà delle oasi dalle sabbie dell'Afghanistan*. Venezia: Erizzo.

- Madjidzadeh, Y. 2003. *Jiroft. The Earliest Oriental Civilization*. Tehran: Ministry of Culture and Islamic Guidance, Printing and Publishing Organization, Cultural Heritage Organization, Tehran.
- Madjidzadeh, Y. and Pittman, H. 2008. Excavations at Konar Sandal in the Region of Jiroft in the Halil Basin: First Preliminary Report (2002–2008). *Iran* 46: 69–103.
- Mander, P. 2007. *I Sumeri*. Roma: Carocci editore.
- Marchesi, G. 2010. The Sumerian King List and the Early History of Mesopotamia. In: Biga, M.G. and Liverani, M. (eds.) *ana turri gimilli. Studi dedicati al Padre Werner R. Mayer, S.J. da amici e allievi*, Quaderni di Vicino Oriente 5. Roma: Università di Roma “La Sapienza”, 231–248.
- . 2016. Object, Images, and Text: Remarks on Two “Intercultural Style” Vessels from Nippur. In: Balke, T.E. and Tsouparopoulou, C. (eds.) *Materiality of Writing in Early Mesopotamia*, Materiale Textculture. Berlin – Boston: de Gruyter, 95–107.
- Masson, V.M. and Sarianidi, V.I. 1972. *Central Asia: Turkmenia before the Achaemenids*. London: Thames and Hudson.
- Matthews, R.J. 1993. *Cities, Seals and Writing. Archaic Seal Impressions from Jemdet Nasr and Ur*. Berlin: Gebr. Mann.
- Matthews, R. 2013. The Power of Writing: Administrative Activity at Godin Tepe, Central Zagros, in the Later Fourth Millennium BC. In: Petrie, C.A. (ed.) *Ancient Iran and Its Neighbours. Local developments and long-range interactions in the fourth millennium BC*, The British Institute of Persian Studies, Archaeological Monographs Series 3. Oxford – Oakville: Oxbow Books, 337–351.
- McCall, B. 2013. Bronze Age Fars. In: D.T. Potts (ed.) *Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press, 283–303.
- Miroschedji, P. de 1972. Prospections archéologiques dans les vallées de Fasa et Darab (rapport préliminaire). In: Bagherzadeh, F. (ed.) *Proceedings of the first Annual Symposium on Archaeological Research in Iran*. Téhéran: Iranian centre for archaeological research, 1–7.
- . 1973. Vases et objets en steatite susiens du Musée du Louvre. *Cahiers de la Délégation Archéologique Française en Iran* 3: 9–77.
- . 1974. Tépé Jalyan, une nécropole du III^{ème} millénaire av. J.-C. au Fars oriental (Iran). *Arts Asiatiques* 30: 19–64.
- Morello, M. 2015. *La produzione vascolare in metallo prezioso nell'Asia Media dell'Età del Bronzo*, PhD Diss., Dottorato di ricerca in Turchia, Iran e Asia Centrale, XI Ciclo N.S., Università degli Studi di Napoli “L'Orientale”, Dipartimento di Asia, Africa e Mediterraneo.
- Mutin, B. 2012. Interactions céramiques en Asie moyenne autour de 3000 av. J.-C: quel(s) modèle(s)? In: Lefèvre, V. (ed.) *Orientalismes. De l'archéologie au musée. Mélanges offerts à Jean-François Jarrige*. Turnhout: Brepols, 263–278.
- Patel, A.K. and Meadow, R.H. 1998. The Exploitation of Wild and Domestic Water Buffalo in Prehistoric Northwestern South Asia. In: Buitenhuis, H., Bartosiewicz, L. and Choyke, A.M. (eds.) *Archaeozoology of the Near East III. Proceedings of the third international symposium on the archaeozoology of southwestern Asia and adjacent areas*, ARC Publications 18. Groningen: Centre for Archeological Research and Consultancy, 180–199.
- Petrie, C.A. 2013. Ancient Iran and Its Neighbours: emerging paradigms and future directions. In: Petrie, C.A. (ed.) *Ancient Iran and Its Neighbours. Local developments and long-range interactions in the fourth millennium BC*, The British Institute of Persian Studies, Archaeological Monographs Series 3. Oxford – Oakville: Oxbow Books, 385–411.

- Pettinato, G. 1972. Il commercio con l'estero della Mesopotamia meridionale nel 3° millennio av.Cr. alla luce delle fonti letterarie e lessicali sumeriche. *Mesopotamia* 7: 43–166.
- Pinnock, F. 1995. Il commercio e i livelli di scambio nel Periodo Protosiriano. In: Matthiae, P., Pinnock, F. and Scandone Matthiae, G. (eds.) *Ebla. Alle origini della civiltà urbana. Trent'anni di scavi in Siria dell'Università di Roma "La Sapienza"*. Milano: Electa, 148–155.
- Pittman, H. 2012. Glyptic Art of Konar Sandal South, Observations on the Relative and Absolute Chronology in the Third Millennium BCE. In: Fahimi, H. and Alizadeh, K. (eds.) *Namvarnameh. Papers in Honour of Massoud Azarnoush*. Tehran: IranNegar Publication, 79–94.
- Porada, E. 1968. True or False? Genuine and False Cylinder Seals at Andrews University. *Andrews University Seminary Studies* 6/2: 134–139.
- Possehl, G.L. 1996. Meluhha. In: Reade, J. (ed.) *The Indian Ocean in Antiquity*. London – New York: International, 133–208.
- Pottier, M.-H. 1984. *Matériel funéraire de la Bactriane méridionale de l'âge du bronze*. Paris: Éditions Recherche sur les Civilizations.
- Potts, D.T. 1999. *The Archaeology of Elam. Formation and transformation of an ancient Iranian state*, Cambridge World Archaeology. Cambridge: Cambridge University Press.
- . 2008a. Puzur-Inshushinak and the Oxus Civilization (BMAC): Reflections on Shimashki and the Geopolitical Landscape of Iran and Central Asia in the Ur III Period. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 98/2: 165–194.
- . 2008b. An Umm an-Nar-type Compartmented Soft-Stone Vessel from Gonur Depe, Turkmenistan. *Arabian Archaeology and Epigraphy* 18: 167–180.
- Potts, D.T. (ed.) 2013. *The Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press.
- Potts, T.F. 1994. *Mesopotamia and the East. An Archaeological and Historical Study of Foreign Relations 3400–2000 BC*, Oxford University Committee for Archaeology Monographs 37. Oxford: Oxford University Committee for Archaeology.
- Ratnagar, S. 2004. *Trading Encounters: From the Euphrates to the Indus in the Bronze Age*. Oxford: Oxford University Press.
- Rossi-Osmida, G. 2002. *Margiana Gonur-depe Necropolis. 10 years of excavations by Ligabue Study and Research Centre*. Trebaseleghe: Il Punto Edizioni.
- Rostovzeff, M. 1920. The Sumerian Treasure of Astrabad. *Journal of Egyptian Archaeology* 6: 4–27.
- Salvatori, S. 1995. Protohistoric Margiana: On a Recent Contribution. Review of IASSCA (International Association for the Study of the Cultures of Central Asia) Information Bulletin 19, Moscow 1993. *Rivista di Archeologia* 19: 38–55.
- . 2008. The Margiana Settlement Pattern from the Middle Bronze Age to the Parthian-Sasanian Period: a Contribution to the Study of Complexity. In: Salvatori, S. and Tosi, M. (eds.) *The Archaeological Map of the Murghab Delta II. The Bronze Age and Early Iron Age in the Margiana Lowlands: Facts and Methodological Proposal for a Redefinition of the Research Strategies*, BAR International Series 1806. Oxford: Archaeopress, 57–74.
- . 2010. Thinking around grave 3245 in the “Royal graveyard” of Gonur (Murghab delta, Turkmenistan). In: Kozhin, P.M., Kosarev, M.F. and Dubova, N.A. (eds.) *On the Track of Uncovering a Civilization. A volume in honor of the 80th anniversary of Victor Sarianidi*. Sankt-Petersburg: Aletheia, 239–252.
- Santoni, G. 1984. Sibri and the South Cemetery of Mehrgarh: Third Millennium Connections between the Northern Kachi

- Plain (Pakistan) and Central Asia. In: Allchin, B. (ed.) *South Asian Archaeology 1981*. Cambridge: Cambridge University Press, 52–60.
- Sarianidi, V.I. 1998. *Margiana and Protozoroastrism*. Athens: Kapon editions.
- . 2002. *Margush. Ancient Oriental Kingdom in the Old Delta of Murghab*. Ashgabat: Turkmen Dowlet Habarlar.
- . 2006. *Gonurdepe: City of Kings and Gods*. Ashgabat: Miras.
- . 2007. *Necropolis of Gonur*. Athens: Kapon editions.
- . 2008. *Margush, Turkmenistan. Mystery and True of the Great Culture*. Aşgabat.
- Sassaman, K.E. and Rudolphi, W. 2001. Communities of Practice in the Early Pottery Traditions of the American Southeast. *Journal of Anthropological Research* 57: 407–425.
- Stein, G. 1998. World Systems Theory and Alternative Modes of Interaction in the Archaeology of Culture Contact. In: Cusick, J.G. (ed.) *Studies in Culture Contact. Interaction, Culture Change and Archaeology*, Center for Archaeological Investigations Occasional Paper 25. Carbondale: Southern Illinois University Press.
- . 1999a. *Rethinking World-Systems: Diasporas, Colonies, and Interaction in Uruk Mesopotamia*. Tucson: University of Arizona Press.
- . 1999b. The Uruk Expansion: Northern Perspectives from Hacinebi, Hassek Höyük, and Gawra. *Paléorient* 25/1: 7–12.
- Steinkeller, P. 1982. The Question of Marhashi: A Contribution to the Historical Geography of Iran in the Third Millennium B.C. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 72/2: 237–264.
- . 2006. New Light on Marhashi and Its Contacts with Makkan and Babylonia. *Journal of Magan Studies* 1: 1–17.
- . 2008. *Marhashi and Beyond: The Jiroft Civilization in a Historical Perspective*. Paper presented at Tehran, 5–9 May 2008.
- . 2014. Marhaši and Beyond: The Jiroft Civilization in a Historical Perspective. In: Lamberg-Karlovsky, C.C., Genito, B. and Cerasetti, B. (eds.) 'My Life is Like the Summer Rose'. *Maurizio Tosi e l'Archeologia come modo di vivere. Papers in honour of Maurizio Tosi for his 70th birthday*, BAR International Series 2690. Oxford: Archaeopress, 691–707.
- Sumner, W. 2003. *Early Urban Life in the Land of Anshan: Excavations at Tal-e Malyan in the Highlands of Iran*. Philadelphia: Museum of Archaeology and Anthropology, University of Pennsylvania.
- Tosi, M. 1974. The Lapislazuli Trade across the Iranian Plateau in the 3rd Millennium B.C. In: *Gururājamañjarikā. Studi in Onore di Giuseppe Tucci*, vol. I, Series Minor 1. Napoli: Istituto Universitario Orientale, 3–22.
- Tosi, M. and Piperno, M. 1973. Lithic Technology Behind the Ancient Lapis Lazuli Trade. *Expedition* 16: 15–23.
- Trigger, B.G. 2003. *Understanding Early Civilizations: A Comparative Study*. New York: Cambridge University Press.
- Vidale, M. 2004. Growing in a Foreign World: For a History of the “Meluhha Villages” in Mesopotamia in the 3rd Millennium BC. In: Panaino, A. and Piras, A. (eds.) *Melammu Symposia IV. Schools of Oriental Studies and the Development of Modern Historiography*, with the collaboration of G.P. Basello. Milano: University of Bologna and IsIAO, 261–280.
- . 2005. The Short-Horned Bull on the Indus Seals: A Symbol of the Families in the Western Trade? In: Franke-Vogt, U. and Weisshaar, H. (eds.) *South Asian Archaeology 2003*. Aachen: Linden Soft, 147–158.
- . 2010. *A Oriente di Sumer. Archeologia dei primi stati euroasiatici 4000–2000 a.C.* Roma: Carocci.
- . 2015. Searching for Mythological Themes on the “Jiroft” Chlorite Artefacts. *Iranica Antiqua* 50: 15–58.

- . 2017. *Treasures from the Oxus. The Art and civilization of Central Asia*. London: Tauris.
- Vidale, M., Bollati, R., Lucardi, M., Re, P. and Uccellini, F. 2016a. Craft Training as Interpsychical Dynamic: A Collaborative Pot from Early Chalcolithic Turkey. Paper presented at the conference *Inside out: Assessing the extended mind. Mind, language and material culture*, University of Catania, 30–31 May 2016.
- Vidale, M. and Frenez, D. 2015. Indus Components in the Iconography of a White Marble Cylinder Seal from Konar Sandal South (Kerman, Iran). *South Asian Studies* 31/1: 144–154.
- Vidale, M. and Lazzari, A. (eds.) 2017. *Lapis Lazuli Working at Shahr-i Sokhta. Interpreting Craft Production in a Urban Community of the 3rd Millennium BC*. Padova and Roma: Antilia.
- Vidale, M., Salviulo, G., Zorzi, F. and Mocchiutti, I. 2016b. Cosmetics and Cosmetology at Shahr-i Sokhta. *Iran* 54:2, 1–24.
- Wendrich, W. 2006. Body Knowledge, Ethnoarchaeological Learning and the Interpretation of Ancient Technology. In: Mathieu, B., Meeks, D. and Wissa, M. (eds.) *L'apport de l'Égypte a l'histoire des techniques. Méthodes, chronologie et comparaisons*, Bibliothèque d'Étude 142. Le Caire: Institut Français d'Archéologie Orientale, 267–275.
- . 2012. *Archaeology and Apprenticeship: Body Knowledge, Identity, and Communities of practice*. Tucson: The University of Arizona Press.
- Wilkinson, T.C. 2012. *Tying the Threads of Eurasia: Trans-Regional Routes and Material Flows in Eastern Anatolia and Western Central Asia, c. 3000–1500 BC*. PhD Diss., University of Sheffield.
- Zarins, J. 1978. Steatite Vessels in the Riyadh Museum. *Atlatl* 2: 65–93.
- Ziffer, I. 2014. The Akkadian Seals in the Hahn-Voss Collection. In: Bleibtreu, E. and Steymans, H.U. (eds.) *Edith Porada zum 100. Geburtstag. A Centenary Volume*. Fribourg: Academic Press – Göttingen: Vandenhoeck & Ruprecht, 45–74.

CHAPTER FIFTEEN

Elam and Babylonia c. 1400–1100 BC

—♦—
Ran Zadok

Introduction¹

During the period under discussion, Elam bordered on a unified Babylonia under the Kassite dynasty, unlike when the preceding period began, under the Kidinuids (c. 1500–1400 BC), when Elam had two different political entities as western neighbours. At that time, central and northern Babylonia were ruled by the Kassites, while southern Babylonia was controlled by the so-called First Sealand Dynasty. Southern Babylonia was united with the rest of Babylonia in c. 1475 BC at the earliest (by Ulamburiaš son of Kaštiliaš III, see Brinkman 1993–1997: 6–7, cf. Gasche 2013: 72: Figure 1). The last ruler of the First Sealand Dynasty, Ea-gāmil, fled to Elam (see [Carter and] Stolper 1984: 32 with n. 244). The region ruled by the First Sealand Dynasty was then exposed to Elamite influence, as no barrier separated Susiana (modern Khuzestan) from the Sealand and adjacent regions to its west.

Elam was ruled by two dynasties during this period; first, the Igihalkids (c. 1400–1210 BC), followed by the Šutrukids (1210–sometime after 1120 BC). No dynasty is recorded thereafter until the 2nd half of the 8th century BC. At that time, Babylonia was under the longest-ruling dynasty in its history, viz. the Kassite one, until 1155 BC when its last member was deposed by the Šutrukid Kutir-Nahhunte. Several synchronisms between Kassite kings and the two Elamite dynasties can be established. Post-Kassite Babylonia was ruled by several successive dynasties. As in the preceding periods, the main arena of peaceful and military exchanges remained the central and southern sections of the Transtigradian corridor, especially the lower Diyāla basin, and the Zagros piedmont. The porous nature of the Elamite-Babylonian frontier in Rāši (modern Deh Lurān) and Yamūtbal is a *longue durée* phenomenon. In the long run, neither Elam nor Babylonia enjoyed any significant territorial gains from their wars. An international trade route connected Elam and the central Zagros region, via the Transtigradian corridor and the Euphrates River, with the Mediterranean (see Boehmer and Dämmer 1985: 73).

Dynastic marriages concluded between both Elamite dynasties and the Kassite ruling house

were aimed at keeping mutual peace between both kingdoms. The Igihalkid kings Pahir-Iššan, Humban-numena I and Untaš-Napiriša married the daughters of Kurigalzu I and Burnaburiaš II, and Šutruk-Nahhunte I was married to Meli-Šihu's daughter (see van Dijk 1986: 163–166). The paradox is that these marriages eventually generated claims to the Babylonian throne by the Šutrukids, and these claims were the ultimate cause of military encounters.

The Elamite raids into the heart of Babylonia, including Babylon, had a religious dimension as well: the Šutrukids took with them to Susa the statue of the main Babylonian god Marduk. This statue was later returned to Babylonia by Nebuchadnezzar I who had temporarily conquered Susa. However, many artefacts, some of importance, like the Hammurabi code stele, remained in Susa until their discovery by modern excavators (for a detailed list see Potts 2016: 226–227).

Kassite Babylonia enjoyed a long rule under the Kassite dynasty, interrupted only by a short interval of Assyrian occupation (c. 1225–1219 BC), after which the Kassite dynasty was restored to power for several decades. Babylonia was united and controlled virtually all the alluvium. It enjoyed an effective central government with an economy dominated by the palatial sector, like most polities in the Near East and beyond during the age of international connections. Salient features are royal donations of land to senior functionaries and other prominent figures in order to secure their allegiance to the crown, and a certain degree of control over the temples. Regarding Elam, what appears on the surface is that it kept its federative structure, but this assumption is based only on the implication of the title “king of Anšan and Susa” borne by most Igihalkid and Šutrukid rulers.² This title was borrowed from the first Sukkalmahs, Ebarat II and Šilhaha (see Vallat 1980: 6), in order to legitimize the new ruling dynasty. Interestingly enough, the Šutrukid Šilhak-Inšušinak I lists the Sukkalmahs and Igihalkids as his predecessors, thereby skipping the Kidinuids. The latter might not constitute a dynasty.

The title *li-ga-we ri-ša-[ak-ki]* (OE, ME *li-ku-me ri-ša-ak-ka₄* with variants), that is, “great for, over the kingdom” (see Anthonioz and Malbran-Labat 2013), which was first borne by Siwe-palar-huhpak, king of Anšan, in the 18th century BC, became part of the titulary of the Igihalkid and Šutrukid kings (except for Kutir-Nahhunte) from the reign of Humban-numena I. The latter was the first ruler after Siwe-palar-huhpak and Tempti-Akun, who used Elamite in his inscriptions.³ *Li-ga-we* “kingdom, realm”, being sacred, was considered a numen: it is recorded as the theophorous element of the anthroponym *Ku-uk-li-ga-we* from Susa as early as the Old Babylonian period (MDP 23 234, 35).

In truth, the actual relationship between both components, viz. Anšan and Susiana, and their administrative structure in this period, are unknown. Humban-numena I's titulary has *me-er-ri-ik*, *ka₄-at-ri* and *hal-me-ni-ik* *Ha-tàm-ti-ik*, which may be rendered (approximately) as “sovereign, master and ruler of the country of Elam”.⁴ These titles precede *su-un-ki-ik* ^(aš)*An-za-an* ^(aš)*Šu-šu-un-ka₄* “king of Anšan and Susa” (König 1965: 37). Hence, it stands to reason

that *Haltamti* “Elam” is a name covering both territorial components. The same applies to Šutruk-Nahhunte I’s shorter titulary where *su-un-ki-ik* ^{as}*An-za-an* ^{as}*Šu-šu-un-ka*₄ precedes *ka₄-at-ri* and *hal-me-ni-ik* *Ha-tàm-ti-ik* (König 1965: 76:22). “Elam” as a name covering both territorial components is also extant in the formula (*Inšušinak*) *na-ap-pi-ip* *Ha-tàm-ti-ip*, [*na-a*] *p-pi-ip* ^{as}*An-ša-an-pi*, *na-ap-pi-ip* ^{as}*Šu-še-en-pi* “The deities of Elam, the deities of Anšan (and) the deities of Susa” in an inscription of Šilhak-Inšušinak I (König 1965: 125: 54, 20, see Vallat 1980: 4). Elam is juxtaposed with Susa in the formulae [*me*]-*ni-ik* *Ha-tàm-ti-ik* *a-ak* ^{as}*Šu-še-en-k[i]* “the ruler of Elam and Susa” and *me-ni-ip* *Ha-tàm-ti-ip* *a-ak* *ba-la* ^{as}*Šu-še-en-ip* “the rulers of Elam and the people of Susa” contained in other inscriptions of the same ruler (König 1965: 120ff.: 54, 2, 18).

Sources for the history of this period are both Babylonian and Elamite; the former written in Akkadian (very few in Sumerian) and the latter written mostly in Middle-Elamite (ME), early Neo-Elamite (NE) and Akkadian. The Elamite sources are all contemporary, except for the important Akkadian letter of a Šutrukid king (presumably Šutruk-Nahhunte I, c. 1190–1155 BC) to a Kassite king, which exists only in a Neo-Babylonian copy (cf. Paulus 2013: 429 with n. 11). Most of the Babylonian sources stem from the period under discussion, with the exception of several later chronicles. The Babylonian and Elamite sources are both royal inscriptions and economic documents. The Middle Babylonian economic documents originate mostly from Nippur and Ur, unearthed during excavations there. The majority of the Elamite sources were also discovered during excavations; most are royal inscriptions from the capitals of Susa and Āl-Untaš-Napiriša. But unlike the preceding periods, when almost all the documentation stems from Susiana,⁵ most of the economic documents from Elam datable to this period are from Anšan (late ME tablets found during excavations in Tall-i Malyān). The number of these economic documents is much lower than the comparable and relatively rich corpus from the preceding Kidinuid period. In addition, they are written in Elamite and their content is much less variegated than that of the mostly Akkadian documentation from the century of Kidinuid rule. The sizable economic documentation from Kapnak (Haft Tepe), which is exclusively Akkadian, spills over into the reign of the early Igihalkid Attar-kittah (see De Graef 2013: 275).

The documentation from Igihalkid and Šutrukid Elam is almost devoid of religious-literary texts. This is only partially remedied by the numerous and partly elaborate Šutrukid royal inscriptions. The Igihalkid Humban-numena I was the first ruler who composed royal inscriptions in Middle Elamite instead of Akkadian (the only four Old Elamite royal inscriptions were written several hundred years earlier, cf. above). The basic type of the ME royal inscriptions is the building inscription. It starts with the presentation of the king (addressing himself in the first person), and his titles, e.g., *li-ba-ak* *ha-ni-ik* “beloved (or ‘chosen’) servant” of the titular deity, followed by a statement that the sanctuary of the deity is built for the king’s life, longevity and happy reign. The inscription ends with a prayer for the

preservation of the renovated edifice (e.g. König 1965: 45: 7). The more elaborate inscriptions contain a longer titulary, more prayers and detailed lists, but they rarely include any historical narrative. Vallat (1998: 308b) observes that Akkadian documents from the Igiḥalkids' time are rare compared with the Elamite ones and "most [Akkadian texts] are only curses against those who might tamper with dedicated works, as if such outrages could come only from Mesopotamia...". In my opinion, the fact that the curses warning those who intend to desecrate the monuments are in Akkadian even when the inscription itself is mostly in Elamite, proves that Akkadian was still widely spoken in certain parts of Susiana during the Igiḥalkid period. The curses were intended, in the first place, to warn the local population in their vernacular. The practice of composing the curses in Akkadian even when the inscription itself is in Elamite is recorded in Susiana as early as Puzur-Inšušinak's reign (c. 2100 BC, De Graef 2013: 267–268, cf. Potts 2016: 113).

An Elamite inscription was added by Šutruk-Nahhunte I on a Babylonian boundary stone (*kudurru*), containing his titles, as well as a damaged laconic statement of his conquest of Babylonia (Paulus 2014: 422–423: MŠ 6). He had erased the inscriptions on Mesopotamian votive gifts (explicitly of Maništušu originally) and replaced them with his own votive inscription for his god Inšušinak (see Braun-Holzinger 1991: 220, 222, cf. Paulus 2013: 439–440 with n. 109).

The Igiḥalkids (1400–1210 BC)

According to a passage of a historical epic embedded in the non-contemporary source of "Chronicle P", Kurigalzu I, king of Babylonia (c. 1400, certainly before 1369 BC), defeated king Hurba-tila of Elam (Steve, Vallat and Gasche 2002–2003: 457, *pace* Gassan 1986: 188, *Elammat* is not to be dissociated from Elam), who invaded Babylonia as far as the lower Diyāla basin (near Dūr-Šulgi in the region of Ešnunna). Kurigalzu I raided Susa and Elam as far as the border of Marhaši according to a fragmentary inscription on a statuette from Susa. This defeat coincides with the demise of the Kidinuid rule. It may in fact be the reason for the emergence of the Igiḥalkid dynasty, in which case the Igiḥalkids owe their rule to the Kassite dynasty of Babylonia (see Fuchs 2011: 241–242). No wonder, then, that this was followed by a period of intermarriage and cooperation between Kassite Babylonia and the Igiḥalkids. The mutual relations between both kingdoms determined the fate of their dynasties. From the depiction in "Chronicle P", which is a non-contemporary and eclectic source, actually it is not clear whether the defeater of Hurba-tila is Kurigalzu I or II (1327–1303 BC). Paulus (2013: 442–444) suggests that it may be Kurigalzu II (see already [Carter and] Stolper 1984: 35, 234) rather than Kurigalzu I, but this would place Hurba-tila within the reign of Untaš-Napiriša (c. 1340–1300 BC).

Pahir-Iššan (c. 1380–1370 BC) and his brother Attar-kittah were sons of Igi-halki. The latter

left an Akkadian inscription at Deh-i Now in Susiana, where he dedicated a temple to the goddess Mazzât (see Vallat 1980: 7). Vallat (1998: 308b) regards Mazzât as an Anšanite deity. In fact, this goddess was popular in Susiana during the Old Babylonian period.⁶ Attar-kittah's son, Humban-numena I (c. 1370–1340 BC), built a temple at Liyan. The relationship (if any) of the Šutrukids to the Igiḥalkids is not known and cannot be proved (see Steve, Vallat and Gasche 2002–2003: 464, who present the case for continuity). The fact that Šilhak-Inšušinak I claims that Humban-numena I was a descendant of the early Sukkalmah Šilhaha may be of relevance here. Given the long chronological gap, the claim is in all probability merely propagandistic. It is analogous to that of the ruler of Sūhu in the mid-8th century BC, who boasts that he is a distant offspring (*līpu rūqu*) of Tunamissah “descendant of Hammurabi” (see Cavigneaux and Ismail 1990: 328–329 *ad* 341, 411:1, 11–14). Humban-numena I's son, Untaš-Napiriša (c. 1340–1300 BC), built a new capital, Āl-Untaš-Napiriša (later Dūr-Untaš), modern Chogha Zanbil, 40 km. southeast of Susa. The reasons for the transfer of the capital from Susa are not known. At the beginning, Inšušinak was the main deity there, but later on he was the second member of the divine pair Napiriša and Inšušinak. The foundation of the temple city Āl-Untaš-Napiriša was an innovative project. This marks a change in the cult (see Álvarez-Mon 2013a: 226–227), but a certain continuity is remarkable. The Akkadian terminology persisted in the latter half of the 2nd millennium BC, when the rulers of Elam started writing their inscriptions in Middle Elamite. One encounters Akkadian loanwords for sacred edifices in Middle Elamite: *kukunnu* “ziqurrat”, *alimeli* “acropolis” (where the temple was located), (*kumpum*) *kiduya* “external chapel”. Is the lack of Elamite terminology for certain sacred edifices due to the Elamite tradition of outdoor sanctuaries? It should be remembered that shrines in OB Susa bore Sumero-Akkadian names and the terminology of sacred edifices was Akkadian. In addition, several temples in early Susa were sponsored and renovated by Mesopotamian conquerors (notably Šulgi) as well as by the princess Me-Kūbi from Ešnunna (see Álvarez-Mon 2013a: 221–222). The Akkadian terms persisted, like that for “priest” *pašišu* (lit. “anointed”, see Vallat 2003: 531, 541). Elamite inscriptions of Untaš-Napiriša contain not only Akkadian loanwords, but also such epithets.⁷ In addition, the Mesopotamian deities Dumuzi > Damuzi, Bēlet-āli, Belilit, Adad and Šala were worshipped in ME Āl-Untaš-Napiriša. Steve, Vallat and Gasche (2002–2003: 464–465) cautiously suggest that the Kassite princesses who married Igiḥalkid kings introduced the cult of Mesopotamian deities to Āl-Untaš-Napiriša. However, it should not be forgotten that most of these deities were worshipped in Susiana since the Sargonic, Ur III, OB and early MB (Kidinuid) periods. The theonyms Ikišta and Šala are still recorded as theophorous elements in anthroponyms from late ME Tall-i Malyān.

Untaš-Napiriša led construction projects in other sites of Susiana, as well as in Huhnur (modern Tepe Bormi, see Mofidi-Nasrabadi 2005).

It seems that the diplomatic marriages contributed to peaceful relations between Elam and

Babylonia at that time. Untaš-Napiriša might have raided a certain region, but its location is not clear as the relevant passage is damaged (the only name mentioned is [xxx]-li-ia-šu);⁸ it is at most an isolated episode. There is no information about activities and events in the time of Untaš-Napiriša's son, Unpahaš-Napiriša, as well as the kings who followed him, viz. Kitin-Hutran II and Napiriša-untaš.

Elamite archers are recorded at Harbê in the upper Jazira in the time of Tukulti-Ninurta I, king of Assyria (1243–1207 BC). It can be surmised that they were brought there by this Assyrian conqueror of Babylonia as prisoners of war together with the Babylonians ("Kassites"), who are also recorded there at that time (see Jakob 2009: 17–18 and Zadok 2012: 575–576 with n. 47). In this case, it can be argued that the Elamites were the Babylonians' allies in their war against the Assyrian king. Given the fact that the Igihalkids were related to the ruling dynasty of Babylonia, it is understandable why they continued their struggle against the Assyrian rule over Babylonia. The Igihalkids (like their Šutrukid successors, cf. below) in all probability considered themselves legitimate heirs to the Babylonian crown after Babylonia had lost its independence. The last Igihalkid, Kitin-Hutran III, fought against Illil-nādin-šumi, the Babylonian king who was Assyria's vassal (1219 BC), from c. 1225 BC. He took Dēr and Nippur, and deposed Illil-nādin-šumi. Later on, Kitin-Hutran III attacked Adad-šuma-iddina (1217–1212 BC), another king of Babylonia who was Assyria's vassal. He conquered Isin and Marad (west of Nippur). No Assyrian anti-Elamite reaction is recorded, presumably because Tukulti-Ninurta I was murdered and Assyria entered a period of instability.

The glyptic of the later Igihalkids (after Untaš-Napiriša) does not resemble that of Kassite Babylonia, in contrast to that of their predecessors which was "pseudo-Kassite" in style (see Neumann 2013: 92–93, cf. McCarthy and Hill 2009: 304–308, esp. 308). There is a restricted similarity between glyptic from mid-2nd millennium Iran (practically Elam) and Bahrein (see McCarthy and Hill 2009: 304–305).

The intimate relations between the Kassite dynasty of Babylonia and Elam under the Kidinuids, Igihalkids and Šutrukids facilitated the adoption of a basic notion of Elamite royal ideology, viz. *kitin* (> Akkad. *kidinnu*) "divine protection, god-given royal power" (see Leemans 1946; CAD K: 342–344 with further lit.).

The Šutrukids (C. 1210–sometime after 1120 BC)

Hallutuš-Inšušinak, father of Šutruk-Nahhunte I and Šilhak-Inšušinak I, did not leave any inscriptions. His relationship to his predecessors is not recorded. It is not known whether he was king. Šutruk-Nahhunte I might have made Susa the capital again: he brought to Susa a stele of Untaš-Napiriša from Āl-Untaš-Napiriša⁹ and a stele of an unknown king from Anšan (see [Carter and] Stolper 1984: 39). Inšušinak, the main deity of Susa, was the titular god of

the Šutrukid dynasty; the sungod Nahhunte also occupied a prominent place in the dynasty's pantheon (cf., e.g., Šilhak-Inšušinak *hu-un-te-ek ba-te-ek* ^d*Nah-hu-un-te-ek* || *ha-ni-ik* ^d*In-šu-uš-na-ak-[ki]*, “Š., subject of Nahhunte, beloved of Inšušinak”, König 1965: 114: 48b, 2). Šilhak-Inšušinak I renovated 20 temples in Susiana (and possibly beyond it), including several sanctuaries of Inšušinak (König 1965: 110–112: 48, for a list of temples in Susa see Potts 2016: 231).

Military campaigns in the west

Šutruk-Nahhunte I controlled vast territories in Elam. The Šutrukids explicitly considered themselves legitimate heirs to the Babylonian crown, according to the above-mentioned letter. Therefore, Šutruk-Nahhunte I invaded Babylonia towards the end of his reign. First, he took away the lower Diyāla basin (ME *Išnunuk*, perhaps a reminiscence of the long extinct polity of early OB Ešnunna) from the Kassites. Thereafter, Šutruk-Nahhunte I defeated Zababa-šuma-iddina, the penultimate king of the Kassite dynasty (in 1158 BC, see [Carter and] Stolper 1984: 40; Fuchs 2011: 255). In the same year, the Assyrian king Aššur-dan I exploited the opportunity and conquered Zabban, Irrīya (Irrē'a) and Ugār-Sallu (Grayson, *Chronicles*: 162:11). However, the Assyrian territorial gains were ephemeral. Šutruk-Nahhunte I's son, Šilhak-Inšušinak I, conquered Ugār-Sallu, Nuzi, Arrapha, Hapate (east of Nuzi) perhaps as far as the banks of the Little Zab (see Potts 2016: 233–2238) implicitly from the Assyrians. A partial itinerary can be composed on the basis of three unpublished inscriptions of Šilhak-Inšušinak I: Māt-Irrīya¹⁰ → Lubdu → Ugār-Sallu → Pilasqu (ME ^{aš}Pi-la-as-ka₄ pu-ul-ku, see Vallat 1993: 217, s.v. Pilazkapulku). Accordingly, the Elamite king advanced from south to north. In Fuchs's opinion, the Diyāla basin remained under Elamite control in the time of Kutir-Nahhunte, Šutruk-Nahhunte I's son and successor. It served as a springboard for the conquest of the rest of Babylonia by Kutir-Nahhunte's brother and successor, Šilhak-Inšušinak I.

Šutruk-Nahhunte I's son, Kutir-Nahhunte (1155–1150 BC), deposed and deported to Elam the last king of the Kassite dynasty, Illil-nādin-ahi (1157–1155 BC). His brother, Šilhak-Inšušinak I (1150–1120 BC), conquered 15 regions (A–O below) with at least 211 settlements, not only in eastern Babylonia but also in the hill country between Babylonia and Assyria in the northeast, where he annexed territory conquered earlier by Assyria from Babylonia. The list of these numerous settlements is embedded in a royal inscription (König 1965: 128–130:54: §§25, 27, 29, 32, 35, 37, 40, 43, 45, 47, 50, 52, 55, 58, 61). Each paragraph consists of a list of locales and a statement about setting a total number of *si-i-la* (meaning unclear, König 1965: 127ff. translated it as “district” whereas Hinz and Koch 1987: 1072 rendered it as “statue”) and the installment of a governor in an administrative centre. Unfortunately, this statement is severely damaged in most paragraphs. Likewise, the names of most settlements (133 out of

211 = 63.03%) are either entirely broken or severely damaged; only 78 toponyms (36.97%) are fully preserved or slightly damaged. Each of the 15 paragraphs is preceded by a prayer. A detailed annotated chart with identifications is offered by Potts (2016: 235–238). The following list is based on it:

A (§25)

1. [...]; 2. [...]-tu₄; 3. Bīt ([^{aš}pi-it)-[...]; 4. [...]; 5. [...]-a-ti; 6. [...].

B (§27, Ugār-Sallu and Ebeh: Ū-ka₄-ar-si-il-la-am-ni E-pe-eh)

1. [...]-e-a; 2. [...]-un-nu; 3. Ša-Šilitu (^{aš}ša-ši-li-tu₄); perhaps it is based on Kass. *šil-* (cf. Balkan 1954: 81 and Hölscher 1996: 209a, s.v. *Šili*); 4. [...];
5. ^{aš}Ša-Pe-el-[...]; 6. [B]īt ([^{aš}p]i-it)-Pu-li-[...].

C (§29)

1. [...]-ri; 2. ^{aš}[...]; 3. [...]; 4. Šenkuru (^{aš}še-en-ku-ru); it is not identical with Zi-ni-ki-ri (*pace* Scheil, MDP 23 164); for *še-en-* cf. perhaps Kass. PN *Šen-Sah* and for *-ku-ru* Kass. *kuri* (Balkan 1954: 66, 80); 5. ^{aš}Ša-[...]; 6. [...]; 7. [Bīt-Nap]pāhē ([^{aš}pi-it Na-a]p-pa-hi-e), Akkad.; perhaps = halzi Nappāhī in the Nuzi region (Fincke 1993: 182, cf. Potts 2016: 235); 8. ^{aš}Ku-ur-[...];
9. [...]; 10. Ša-immerē (^{aš}ša-i-mi-ri-e) “(the place) of the asses”, Akkad.; the identification with Imēri in the Nuzi region (Fincke 1993: 117) is unlikely as the latter is in the singular form; 11. ^{aš}H[a- ...]; 12. [...]; 13. [...]-ki-te-ek-ku; 14. ^{aš}[...]; 15. [...]; 16. [Bī]t-n[ā]giri ([^{aš}pi-i]t-n[a]-ki-ru, Akkad.); 17. ^{aš}Ša-[...]; 18. [...]; 19. [Bīt?-P]ilantu ([^{aš}pi-it?-p]i-l[a]-an-tu₄), Kassite (see Balkan 1954: 76, 92); 20. ^{aš}[...]; 21. [...].

D (§32)

1. Ša-barbari (^{aš}ša-ba-ar-ba-ri) “(the place) of the wolf” (or “of B.”, cf. Hölscher 1996: 47a, s.v. *Barbaru*, Akkad.); 2. ^{aš}Ša-al-ta-[...]; 3. ^{aš}Ša ^mx-[...] namkari (na-an-ka₄-ri), Akkad. “irrigation canal”; 4. [...]; 5. Bī[t-..] (^{aš}pi-i[t-...]); 6. Bī[t-...] ([^{aš}pi-[it-...]; 7–8. 2 ^{aš}Ša-[...]; 9. [...].

E (§35)

1. Sillam (^{aš}si-el-la-a[m], *pace* Frayne 1992: 56, not Tall as-Slēma which is in all

probability Awal); 2. [...]; 3. Bīt-[DN] (^{aš}pi-it-d[...]); 4. Dunnu (^{aš}tu₄-un-ni), Akkad. *dunnu* “fort, fortified area”; 5. ^{aš}Ar-ti-[-...]; 6. Bīt(^{aš}pi-it)- [... -a]r-ri-ka₄; 7. ^{aš}Ša-Pu-uh-[-...]; 8. [^{aš}Ša-^m[-...]; 9. Matku (^{aš}ma-at-ku)-[-...]; 10. [...]; 11. [...]-pi-ši-[-...]; 12. ^{aš}Ša-Si-[-...]; 13. [...]; 14. Bīt-Sîn-erība (^{aš}pi-it-dXXX-i-ri-ba, Akkad., cf. Hölscher 1996: 187a); 15. [...]; 16. Bīt-Kadašman (^{aš}pi-it-ka₄-ta-áš-ma-an, Kass., see Balkan 1954: 92), possibly in the Transtigridian region (see Brinkman 1968: 258, n. 1641).

F (§37)

1. Ašuhaš (^{aš}a?-šu-ha-áš) – perhaps Ašūhiš of MB Nuzi (see Potts 2016: 234–235; south of Arrapha, see Fincke 1993: 57–58 with lit.); 2. Bīt-Lassi? (^{aš}pi-it-la-as-si-i?); 3. [^{aš}Š]a-[-...]; 4. [Bī]t-Sîn-šemi ([^{aš}pi-i]t-dXXX-še-mi, Akkad., cf. Hölscher 1996: 192a); 5. Bīt-etellē (^{aš}pi-it-e-te-el-li-e) “the place of princes, lords” (Akkad.); 6. [... -š]a?-a-a; 7. Matka (^{aš}ma-at-ka₄ = ~ (‘Ma’-at-qa) of MB Nuzi (see Vallat 1993: 179–180). Heimpel (2009: 28), who identifies Matka (Ur III Madga) with Hīt (cf. Zadok 2014b), states that Madga is not recorded after the Ur III period. He does not take into account the occurrence of Matka in the Nuzi corpus and in the inscription of Šilhak-Inšušinak I. MB/ME Matka may be located near modern Kifri or Tāze Ḥurmatli (on the ‘Aḏēm river). The distance from Umma to the Kifri region is only slightly more than that from Umma to Hīt. Madga-bound boats (see the thorough discussion of Heimpel 2009: 33, n. 16; 35–36 and *passim*) could have reached Matka, which was situated near a river and a canal (see Fincke 1993: 176). Gudea imported from Madga not only bitumen but also limestone and gypsum, materials which are found in the hill country around Kirkuk. The Sumerians brought dates to Madga, fruits which are not commercially grown in that hill country. 8. Ša(-)Hāla (^{aš}ša-ha-a-la), tentatively Šehala of MB Nuzi (see Potts 2016: 234, the forms are different); cf. the Kassite theonym *Hala* = *Gula*, which is recorded as a theophorous element (Balkan 1954: 106, cf. 47); 9. Appi-šinipeti (^{aš}ap-pi-ši-ni-pe-ti) apparently contains Akkad. *šinipeti* “two-thirds”; the initial component is *appu* “spur of land (made artificially), causeway, bund” (CAD B: 189, s.v. *appu* A, 3, where the measures of these earthworks are indicated); 10. Ša-Arad-ekalli (^{aš}ša-ARAD-e-gal-li, Akkad.) is not identical with Ekalli near Nuzi (cautiously suggested by Potts 2016: 236); 11. Kiprat (^{aš}ki-ip-ra-at) “Kipri near Nuzi (Fincke 1993: 146–147)?” (Potts 2016: 234). However, the ending (-at) is different.

G (§40)

Administrative centre: 1. [...] -til-la, perhaps Ithi-tilla (Fincke 1993: 125). The latter was linked to Āl-ilāni = Arrapha (see Zaccagnini 1979: 164). It apparently ends with Hurr. -*tilla* (cf. Gelb et al. 1943: 267, like the toponyms Iriri-tilla and Tupki-tilla (Fincke 1993: 124, 301–302). Tilla was a fortified town and one of the cultic centres of the district of Arrapha (see Fincke 1993: 293–294); 2. Arrapha (^{aš}ar-ra-ap-ha); 3–4. Nuzi (2 ^{aš}nu-ú-za) – It is probably implied here that this important town consists of two sections. In fact, Nuzi and Anzukalli formed one administrative unit (see Fincke 1993: 199); 5. ^{aš}.^d[...]; 6. [... .]; 7. Hapate (^{aš}ha-an-ba-te-e); 8. ^{aš}Ti-tu?-[...]; 9. [...]; 10. Ša-nišē (^{aš}ša-ni-še-e) should be differentiated from MB Nuzi Šinišhe (differently Potts 2016: 236).

H (§43)

1. [...]; 2. [...]; 3. [...]; 4. [...]; 5. [...]; 6. [...]; 7. [...]; 8. ^{aš}.^d[...]; 9. [...]; 10. [^{aš}]xx-ba-[x]-hi; 11. ^{aš}Ša-[...]; 12. [...]; 13. Dunnātu (^{aš}tu₄-un-na-ti), presumably “inferior quality” (NB); 14. [...]; 15. [...]; 16. [Š]a-Hanta ([^{aš}š]a-ha-an-ta, non-Sem., cf. Gelb et al. 1943: 213b, s.v. *hanta*); 17. Bī[t-..] (^{aš}pi-i[t- ...]); 18. [...]; 19. [Bī]t-rē’ê rabû ([^{aš}pi-i]t-ri-e-ra-rap-pi), i.e. “Great Bīt-rē’ê” implying the existence of a settlement Bīt-rē’ê šehru “Little Bīt-rē’ê” (cf. below, I, 12–13).

I (§45)

1. Bīt-Bahê (^{aš}pi-it-ba-hi-e), cf. Hölscher 1996: 43–44, s.v. Bahû; 2. ^{aš}Ša-Ku-uš-[...]; 3. [...]; 4. Ša-Burna-mašhum (^{aš}ša-bu-ur-na-ma-áš-hu-um, Kass., see Balkan 1954: 99; Akkadianized form of *Burna-mašhu* > *Burra-mašhu*, cf. Hölscher 1996: 57a); 5. ^{aš}Ma-[...]; 6. [Bīt?-I]štar ([^{aš}pi-it?-i]š-tar) is not necessarily identical with Bīt-Ištar in the Zagros (*pace*König 1965: 128, n. 7 *ad loc.*); 7. Hurātu (^{aš}hu-ra-tu₄), perhaps Akkad. (cf. Ahw.: 358a); 8. Iširtu ša Adad (^{aš}i-ši-ir-tu₄ ša ^dIM x) “sanctuary of Adad” or “decury of Adad-x” (Akkad.); 9. [...]; 10. Ša-Anpima (^{aš}ša-an-pi-ma), perhaps < *Appi-ma with dissimilation of *appu*; 11. Hurāt (^{aš}hu-ra-at)-^dŠa-ri-e-GUD? (cf. 7 above?); 12. [Bīt-ri]dûti rabû ([^{aš}pi-it-ri]-tu₄-ti GAL), “residence of the crown prince; administrative centre”, Akkad.; originally a royal estate (the great and the little one are juxtaposed, 13 below, cf. CAD R: 328a, s.v. *ridûtu* in *bīt* ~, c); 13. Bīt-ridûti šehru (^{aš}pi-it-ri-tu₄-ti TIM); 14. [Ki]tin?-Sîn ([^{aš}ki?]-te-en-^dXXX), cf. Hölscher 1996: 122–1123, s.v. Kidin-Sîn (with an the Elamite predicative

- element borrowed in Akkadian); 15. Bīt (^{aš}pi-it)-It-ta-[tu?];
16. Rēšu (^{aš}ri-e-šu) “top, summit” (Akkad.); 17. Bīt-Rigim-Adad ([^{aš}]p[i-i]t-ri-ki-im-^dIM, cf. Hölscher 1996: 177b, s.v., Akkad.); 18–19. Bīt-Muqīya (2 ^{aš}pi-it-mu-gi-ia), Akkad.

J (§47, Turun Ebeh)

administrative centre: Alman = Halman, Medieval (Classical Arab.) Ḥulwān, modern Sarpol Zohāb, on a tributary of the Diyāla (= Turun), southeast of Jabal Ḥamrīn (= Ebeh, see Nashef 1982a: 15, 115). ^{aš}Ha-al-ma-an is recorded in another inscription of Šilhak-Inšušinak I, which also lists [^{aš}]Uš-mar-ma-za-ah (apparently with Kass. – *Sah*) as well as ^{aš}Pi-it (= Bīt) Pu-ul-zu-šu and ^{aš}Li-ip-tu₄ (Akkad. “craft creation” or a variant of *laptu* “turnip”, König 1965: 133: 54b: 1, 4, cf. CAD L: 200–202, s.vv. *liptu* A, B, the latter was eaten together with *su-un-gi-ra*, which looks like an originally Elamite phytonym, viz. *sunki-r*; for the naming cf. Gk. “basil, ocimum basilicum”, but this does not prove that *sungira* is the same plant as basil).

K (§50)

1. Nahiš-bararē (^{aš}na-hi-iš-ba-ra-ri-e), the initial component is perhaps either Akkad. *nahiš*- or < Kass. *nahzi* (cf. Hölscher 1996: 146); 2. ^{aš}Ba-ta-s[i- ...];
3. [...] -ša; 4. Ša-Hilik (^{aš}ša-hi-li-ik); 5. Ša-Pālihu (^{aš}ša-ba-li-hu), cf. Hölscher 1996: 166a, s.v. *Pālihu*, Akkad.); 6. ^{aš}Ma-an-...; 7. [Mu]rattaš ([^{aš}mu]-ra-at-taš, Kass., see Balkan 1954: 98); 8. Dunnu (^{aš}du-un-nu), Akkad. (cf. E, 4 above); 9. Bīt-Uzāl[i?] (^{aš}pi-it-ú-za-l[i?- ...]), perhaps Akkad. (cf. Hölscher 1996: 233a, s.v. *Uzālu*); 10. Bīt-Hānibi (^{aš}pi-it-ha-ni-pi), cf. Hölscher 1996: 80–81, s.v. *Hānibu*, Akkad.; 11. Ša-Kūbīya (^{aš}ša-ku-pi-ia) contains a hypocoristicon of Akkad. *kūbu(m)*, cf. *Kūbu-illassu*, -*īriš* (Hölscher 1996: 125b); 12–14. Bītāti (3 ^{aš}pi-ta-ti) [ša...] “households” (Akkad.), apparently three conglomerates of (Kassite?) kin-based groups; 15. [^{aš}x-š]i-il-ba; 16. Bīt-Nagīya (^{aš}pi-it-na-gi-ia), probably to Akkad. *nagû*, cf. Nagutu /Nāgûtu/ (Hölscher 1996: 145b); 17. Ša-Kattar-Sah (^{aš}ša-ka₄-at-tar-za-ah, Kass., see Balkan 1954: 99); 18. [...]; 19. [Duh]ub/puna? ([^{aš}du?-h]u-b/pu-na) has nothing to do with NA Di'bīna (cf. Vallat 1993: 58 with lit.); 20. Ana-hutaš (^{aš}a-na-ah-hu-taš, Elam., see Zadok 1984: 6:11; 14:56); 21. Bīt-Sîn-išmanni (^{aš}pi-it-^dXXX-iš-man-ni), Akkad. (cf. Hölscher 1996: 189a); 22. [B]īt-Siliya (^{aš}[pi]-it-si-li-ia), probably Hurrian (cf. Hölscher 1996: 184a,

s.vv. *Sili*, *Sil-Tešub*); 23. Ša-sahmi (^{aš}ša-za-ah-mi), cf. Akkad. *sahmu* “crushed?” and as a topographic term at Nuzi (CAD S: 66); 24. Bīt-Ša-ilti (^{aš}pi-it-ša-il-ti(-...)), if complete, cf. Akkad. anthroponym Ša-ilti (Hölscher 1996: 200b); 25. [Bī]t-Hubbani ([^{aš}pi-i]t-hu-up-ba-ni < Elam. theonym *Humban* (cf. Zadok 1984: 11–13:48); 26. Ša-Marazza (^{aš}ša-mar-az-za).

L (§52)

1. ^{aš}Ša-Ik-la-x?-a-i; 2. Ša-Šangibar[i] (^{aš}ša-ša-an-gi-ba-r[i]), non-Sem.; 3. Dimti-Ili-ēriš ([^{aš}ti-i]n-tu₄-i-li-e-ri-iš), Akkad. (cf. below, 6 and Hölscher 1996: 93b, s.v. *Ili-ēriš*); 4. Bīt-Matimu (^{aš}pi-it-ma-ti-mu); 5. [Bī]t-Lā-qīpu ([^{aš}pi-i]t-la-ki-pu), Akkad. (cf. Hölscher 1996: 131a, s.v.); 6. Dimtu (^{aš}ti-in-tu₄), “watch-tower, fortified dwelling”, Akkad.; 7. Bīt-Rigim-Adad (cf. I,17 above); 8. [...]za-hu-ka₄; 9. Bīt-Tamtiya (^{aš}pi-it-ta-am-te-ia); Tamtiya may be based on Kass. *Tamd/t-* (cf. Balkan 1954: 83 and Hölscher 1996: 217a, s.v. *Tamti-Ištarān*); 10–12. Harbātu (3 ^{aš}ha-ar-ba-tu₄) “deserted, abandoned lands” (Akkad.); 13. [^{aš}xx]-ur-ku-up-pu-uh-ti; 14. Bīt-Šumaliya (^{aš}pi-it-na-^{<ap>}šu-ma-li-ia), contains the Kassite theonym *Šumaliya* (see Balkan 1954: 92); 15. [...]x-lu-e; 16. Bīt-Tasak-šarri (^{aš}pi-it-ta-sak-LUGĀL); 17. Bīt(^{aš}...)-Iš-ši-h[u(-)...]; 18. [...]ti; 19. Ša-Burra-hutta (^{aš}ša-bu-ur-ra-hu-ut-ta), apparently hybrid, Kass., *burra-* < *burna-* (see Balkan 1954: 99) and Elam. *-hutta* (Zadok 1984: 14:56); 20. ^{aš}Uz-z[i-...]; 21. [...]i]k; 22. Bīt-Barbari (^{aš}pi-it-ba-ar-ba-ri), “wolf’s place” (or “B.’s place”, Akkad., cf. above, D, 1); 23. [...]ia; 24. ^{aš}URU?-ka₄-ap-lu (*kaplu* is perhaps Hurrian, cf. Richter 2016: 151).

M (§55)

Administrative centre: 1. [^{aš}xx-l]i-li-ir-ka₄-at-tar; it apparently ends in Kass. *katar* (cf. Balkan 1954: 63, 98, 159; for the spelling cf. *Ka₄-at-tar-za-ah*, above, K, 17); 2. [Bīt-K]ilala ([^{aš}pi-it-k]i-la-la); 3. ^{aš}Za-ka₄-[...]; 4. [...]tu₄ š[a..]; 5. [Bī]t-Naggāri ([^{aš}pi-i]t-na-an-ga-ri, Akkad.); 6. Bīt[...-]x[...] (^{aš}pi-i[t-...] URU? [...]); 7. [^{aš}x]-šil-ti, cf. perhaps Hurr. *šelt* (Gelb et al. 1943: 255a); 8. Dan-silam (^{aš}ta-an-si-la-am); 9. ^{aš}[...-t]u₄-ka₄-ar-[...]; 10. [Bīt?]-Kanbateya ([^{aš}x]-ka₄-an-ba-te-ia), *kan* + *b/pat* (Kass.?); 11. Bīt(^{aš}pi-it)-Š[i-...]; 12. ^{aš}Ša-[...]; 13. Bīt-Kunzubati (^{aš}pi-it-ku-un-zu-ba-ti), Kass.? (for *kunzi* see Richter 2016: 447 with n. 461, who quotes Jaritz 1957: 878 and for *-bati* Balkan 1954: 98 *ad Kilam-bate*); 14. ^{aš}A-ta-[...]-ap-n[a-...]; 15. Puhutu (^{aš}pu-hu-tu) may be a

hypocoristicon of a compound anthroponym with Akkad. *pūhu* “substitute”; 16. Nakapu (^{aš}na-ka₄-pu) is probably the same place as OB ^{uru}Na-ka-b/pu-um (Abdi and Beckman 2007: 55–56, 81: 20, i, 10’), cf. perhaps Akkad. *naga/āb/pu, nakāpu* A, B (CAD N/1: 105, 156–1159) and NA Nakkapu (extant in the gentilic Nak-kap-A+A), which is mentioned together with Bīt-Sangibuti and according to Streck (1998–2001) was perhaps located in the Zagros; 17. ^{aš}Za-al-l[a-...]; cf. perhaps Za-al-li^{ki}, which is mentioned in the same document as Na-ka-b/pu-um (Abdi and Beckman 2007: 55–56, 81: 20, i, 16); (18. ^{aš}Ki-x-šu; 19. Bīt-rāpiqi ([^{aš}]pi-it-ra-ap-i-ku(-[...])) is hardly identical with *Rāpiqu* in northwestern Babylonia (cf. Brinkman 1968: 127, n. 748; Vallat 1993: 47 with lit.); *rāpiqu* is an active participle of *rapāqu* “to hoe, break up the (uncultivated) soil, dig up (weeds)”. The verb is recorded in OB and MB (CAD R: 150) and hence it can potentially produce toponyms in 2nd millennium Babylonia, in which case a quasi-homonym of the town in northwestern Babylonia might have existed in northeastern Babylonia.

N (§58)

1. Kitan (^{aš}ki-ta-an) is very probably identical with OB ^{uru}Ki-da-an^{ki}, which is mentioned in an administrative document from Chogha Gavaneh (Abdi and Beckman 2007: 55–56, 81: 20, i, 8), two lines before ^{uru}Na-ka-b/pu-um (N, 16 above), cf. the UR III ruler’s name *Ki-da-ni lú-Ša-rí-it-hu-um^{ki}* (= *Šuruthum*, *Šariphum* and perhaps *lú-Ša-ri-it-tu₂₀*(DÜ)^{ki}, Edzard and Farber 1974: 177–178, 187, s.v. *Šuruthum*, cf. Sigrist 2000, 1163, 7) near *Šašrum* = *Šušarra*, modern *Šemšarra*, in the piedmont of the central Zagros. *Šu-ru-ut-hi-im* is recorded in a document from OB *Šemšarra* (Eidem and Laessoe 2001, 41, 4’) and is extant in ^{aš}Ni-ri-pu-ni *Šu-ru-tu₄-ha* (< Akkad. **Nērebu ša Šuruthi* “the pass of Š.”), which is mentioned in another inscription of Šilhak-Inšušinak I,¹¹ 2. ^{aš}[...]; 3. Nār-[Si]llam ([^{aš}]na-ar-[si-i]l-la-am); 4. ^{aš}[...]; 5. Bī[t-x]hatu (^{aš}pi-i[t-x]-ha-tu₄); 6. ^{aš}Na-[...]; 7. Bīt-[DN]-napšira (^{aš}pi-i[t-^dx]-na-ap-ši-ra), Akkad. (cf. *Nusku-*, *Sîn-* and *Šamaš-napšira*, Hölscher 1996: 164b, 191, 204a); 8. [...]; 9. Bīt-Ummašap (^{aš}p[i-i]t-um?/URU?-ma-ša-ap); 10. ^{aš}[...]; 11–12. 2 ^{aš}[...]; 13. Harab/p (^{aš}ha-ra-AB);
14. ^{aš}[...]; 15. Bīt-[I]qīš?-Adad (^{aš}pi-it-[i?]-kiš-^dIM), Akkad., cf. *Iqīša-Adad* (Hölscher 1996: 104–105); 16. [...]; 17. Bīt-[A]murri? (^{aš}pi-i[t-a?]-mu-ur-ri); perhaps Akkad. (for MB *Amurru*-names cf. Hölscher 1996: 30–31); 18. [...]; 19. Bī[t-K]ilak[...] (^{aš}pi-i[t-k]i-la-ak-[]), perhaps Elam. -*kilak* (cf. Zadok 1984:

O (§61)

Administrative centre: 1. ^{aš}Š[i-...]); 2. [...]; 3. Kulāna (^{aš}ku-la-a-na); 4. [...];
5. Bīt ([^{aš}]pi-it)-[...]; 6. [...]; 7. Bī[t-...] ([^{aš}]pi-i[t-...]).

Regarding linguistic affiliation (with various degrees of plausibility), 43 out of 78 (55.12%) toponyms are purely Akkadian, but most of the 35 remaining ones are hybrid, as they begin with Akkad. *bīt* or *ša*. An additional toponym is probably Akkadian with a non-Semitic suffix (F, 1) due to linguistic interference. The homonymous settlements (E, 4, K, 8 and J, 17, L, 7) are Akkadian. The second largest group is Kassite, but with just 12–14 toponyms (17.94–15.38%) it lags far behind the Akkadian group. Moreover, only three toponyms (3.84%) are purely Kassite (C, 4, K, 7 and M, 1). The remainder are hybrid, as they begin with Akkad. *bīt*- or *ša*- (B, 3, C, 19, E, 16, F, 8, I, 4, K, 17, L, 9, 14, M, 13). One toponym is either Akkadian or Kassite (K, 1), and another one is hybrid Kassite-Elamite (with Akkad. *ša*-, L, 19). Four toponyms (5.12%) are Hurrian (G, 1, L, 24, M, 7; K, 22 is hybrid with Akkad. *bīt*-). Three toponyms (3.84%) are Elamite, but only one (K, 20) is purely such, whereas the remaining two are hybrid (with Akkad. *bīt*-, K, 25, N, 19). Two toponyms (2.56%) are non-Semitic, but their specific affiliation cannot be established; both are hybrid (with Akkad. *ša*-, H, 16, L, 1). Eleven toponyms (14.1%) are unexplained: one begins with Akkad. *bīt*- (F, 2). Two or three contain the same component (sillam, E, 1, M, 8 and perhaps N/ 3; the remaining ones are F, 7, G, 2–4, L, 16, N, 1 and O, 3).

The fragmentary itinerary quoted above leaves no doubt that Šilhak-Inšušinak I advanced from south (the Diyāla basin) to north (the Babylonian hill country south of the Little Zab). However, the preserved regions of the long list seem to be arranged not from south to north but from north to south (possibly not without deviations; A, which is severely damaged, is left out):

B: Ugār-Sallu and Ebeh; C: Nuzi region? (Bīt-nappāhī), F: Nuzi region (Matka and Ašuhaš), G: Nuzi and Arrapha (with very few Hurrian and Hurrianized toponyms; residual Hurrian toponyms are also recorded in K, L and M), J: Alman (Hulwān); K has two Elamite toponyms and L contains *dimtu*-toponyms, while N has one Elamite toponym. The occurrence of at least two toponyms (M, 16 and N, 1), which are identical with settlements mentioned in the OB archive from Chogha Gavaneh, strengthens the case for locating the locales of M and N in or near Namri (southwest of Kermanshah, cf. Potts 2016: 234 with lit.). *Dimtu*-toponyms are recorded not only in Babylonia (OB, MB), but also in OB Susiana and in Rāši (during the Sargonid period). It stands to reason that the numerous toponyms in K-N refer to settlements in the Diyāla basin, the Zagros piedmont and Rāši. Hybrid names (Elamite preceded by Akkad. *bīt*- or *ša*-) are found in Susiana as well (see Vallat 1993: cxxxvi). On the whole, most of the anthroponyms contained in the toponyms of the type *bīt*-/ *ša*-PN are current in MB

Babylonia (cf. the many references to the corpus of Hölscher 1996 above, *passim*). It stands to reason that they refer to relatively recent foundations or ephemeral settlements.

A campaign is recorded in a ME royal inscription, where the ruler's name is entirely broken (restored as either Šutruk-Nahhunte or Šilhak-Inšušinak). ^{aš}Hu-us-si- [...], which is mentioned after the Tigris and before the Euphrates, is not necessarily identical with MB Huššu of Nebuchadnezzar I as suggested by König (1965: 134, n. 10 *ad* 55, see Potts 2016: 238, cf. below) but could be a compound toponym in view of the break. It cannot be proven that ^{aš}Ni-me-et-tu₄ Mar-tu₄-uk (< Akkad. Nēmetti-Marduk, cf. NA Né-met-ti-šarri (MAN), somewhere between Gananati and Dēr, Grayson 1996: 190: Šamši-Adad V A.0.103.2, iii, 30'), which is mentioned after the Euphrates, is identical with Nippur. This fragmentary inscription can be compared with unpublished inscriptions of Šilhak-Inšušinak I, which record his conquests in the Diyāla basin and adjacent regions, viz. Akkad (^{aš}ak-ka₄-tu₄), Ša-B/Pahuti (^{aš}ša pá-hu-ti), Māt-Irrīya (^{aš}ma-at ir-ri-ia) and further north (Vallat 1993: 5, 179, 250, s.vv. Agade, Mat-Irriya and Ša Pahuti, cf. the reconstructed itinerary above). There is no evidence for diplomatic marriages after Šutruk-Nahhunte I (see Steve, Vallat and Gasche 2002–2003: 464). It seems that the later Šutrukids reverted to endogamy because of their negative experience with their ruling Kassite relatives. Their military encounters intensified after Šutruk-Nahhunte I's attempt to persuade the Kassite monarchs that he was the legitimate heir to the Babylonian crown. This turning point marks the end of the age of international connections in the Babylonian-Elamite arena, several decades after this age terminated in the western Fertile Crescent and the Eastern Mediterranean.

Šutruk-Nahhunte I renovated a temple of Kamul (see Kozuh 2014: 138–139), who is in all probability originally a Kassite deity, presumably the deified Mount Kamulla, which was perhaps situated south or southeast of the Radanu river near the Diyāla basin (see Nashef 1982a: 148). His cult might have been introduced to Elam by a Kassite princess. The monumental art of the period of the Šutrukid conquerors is characterized by creative genius (see Álvarez-Mon 2013b: 221–225).

A vague echo of the intensive Elamite incursions into Babylonia is recorded in a MB omen with no specific date, containing the statement “The Elamites (lit. “Elam”, NIM.MA^{ki}) will be in the interior, midst of my land” (Heessel 2012, 86, rev. 3, 4, cf. 13–15, rev. 21–23: “Elam will attack me”).

The coup of Marduk-kabit-ahhēšu (1150–1140 BC), the founder of the 2nd Isin dynasty, was supported by Elam, but his successor, Itti-Marduk-balāṭu (1139–1132 BC), ignored the Elamite rule (see Fuchs 2011: 256). Hutelutuš-Inšušinak, son of Šilhak-Inšušinak I, was defeated by Nebuchadnezzar I (1125–1104 BC) in about 1120 BC (see Fuchs 2011: 256). The latter reached Dēr and conquered Susa, controlling it for some time. He also controlled parts of the Zagros. The Elamite king fled, probably to Anšan (see Potts 2016: 244–245, cf. Paulus 2014: 509 with n. 17), marking the end of Elam's involvement in Babylonian politics. Thereafter the conflicts

were between Babylonia and Assyria.

A donation of plots of land in Huššu and several other places to the deity Eriya from the city of Di-in-LUGAL in Susiana is recorded on a boundary stone.¹² The priests of this deity, viz. Šamāya and his father Šamû'a, descendants of Nūru-līšir (< Ninurta?~), had fled from Elam to Babylonia and later joined Nebuchadnezzar I on his campaign against Elam from which the Babylonian conqueror brought the statues of Marduk and Eriya to Babylon. Thereafter, Nebuchadnezzar I transferred the statue of Eriya to Huššu. It may be a case of remuneration to important collaborators from Susiana by Nebuchadnezzar I.

Hutelutuš-Inšušinak had a brother, Šilhina-hamru-Lakamar (see Vallat 1999: 5, 14). It is not known when the rule of the Šutrukid dynasty came to an end. For three or four kings, who ruled over Anšan (if not beyond it) around 1000 BC, see Stolper (2013, especially 404). One Babylonian king, Mār-bīti-ahhē-iddina (984–979 BC), who was related neither to the preceding nor to the following dynasty, was of Elamite extraction. A much later intervention occurred only in 814 BC, when the Elamites supported Babylonia against Assyria (see Brinkman 1968: 165–166, 209).

Elamites in Babylonia

Some individuals in the rich MB documentation from Nippur are defined as Elamites or bear Elamite anthroponyms (including hybrid names, see Zadok 1987: 13–16; 1991: 230:138–142; hybrid names: 140, 142, cf. 1994: 47a). These Elamites are recorded at Nippur and its region when Elam was dominated by the Igihalkids. The netherworld deities Šimūt and Napiriša are recorded as theophorous elements in most of them (references are to Sassmannshausen 2001):

Ki-din-na-wi-ir-ša, *-na-mi-ir-ša* (= *Napirša*, 31, 20 and 55, 59, respectively, Kur. 6); *Si-mu-ut-AN-da-áš* (1, 9, Bur. 25); *^dSi-mu-ut-GAL* (100, 4, Naz. 24; ^{kur}Ra-ši is mentioned in the same text, line 10); *^dSi-mu-ut-na-pi-ir* (302, ii, 9, Naz. 10); and *^dSi-mu-ut-aha-iddina* (ŠEŠ-SUM^{na}, 77, 4, 11, Kur. 10). See Sassmannshausen 2001: 133. *Kiri-r* is the theophorous element of *Ki-ri-ru-du-uk* (with – *utuk*, cf. Zadok 1984:20:103a, 47:282). *Su-gi-ir-pu-(un-)ni*, *Su-ùg-ir-pu-ni* fulfilled an important administrative function (see van Soldt 2015: 27–28).

No Elamites are mentioned in MB documents from the Ḥamrīn basin. However, the material culture, especially the fine pottery, from Tall Yalḫi in the Ḥamrīn basin shows greater affinity to Susiana as well as to Rāši, the adjacent regions of the Transtigridian corridor and the southern Zagros, than to that of the Mitanni-controlled region to the north during the period under discussion (see Oselini 2016: 36–38). The glyptic from the Ḥamrīn basin betrays Elamite influence to some extent (see Boehmer and Dämmer 1985: 73). Elamites are not recorded in the documentation from MB Ur, whereas in the preceding (late OB) period they are amply attested in the recently discovered texts from Tall Ḥēbar northwest of Ur¹³ (together with

Tilmunites and Kassites).¹⁴ Elamite animal vessels (Tiergefäße) were found in Ur under the Kurigalzu layer (see Börker-Klähn 1970: 68ff. and Braun-Holzinger 1991: 111).

Notes

- 1 Abbreviations are as in A. L. Oppenheim et al. (eds.) *The Assyrian Dictionary of the Oriental Institute of the University of Chicago* (Chicago-Glückstadt 1956–2010), unless otherwise indicated. Transliterated names are not capitalized if they are preceded by their transcription. Non-bibliographical abbreviations: ME = Middle Elamite; NE = Neo-Elamite; OE = Old Elamite.
- 2 The title with the inverted order, viz. “king of Susa and Anzan”, is recorded in the inscriptions of Attar-kittah (see [Carter and] Stolper 1984: 36). It can be restored in an Akkadian inscription of Untaš-Napiriša (cf. Paulus 2013: 439, 2), whereas the title “king of Anšan and Susa” is invariably used in his numerous Elamite inscriptions.
- 3 König 1965, 3 and 67, 70, respectively, (see [Carter and] Stolper 1984: 37, Vallat 1990 and De Graef 2013: 276). An additional OE royal inscription was published by Farber 1974–1975, but the name of the ruler is not preserved.
- 4 Cf. OE *me-ni-ik Ha-da-am-[ti-ik]* in the inscription of Siwe-palar-huhpak (König 1965: 34: III, see Tavernier 2016).
- 5 The undeciphered proto-Elamite material is not taken into account here.
- 6 Cf. ^d*Ma-za-at* of Pi-ša-an-ne (MDP 28 441, 20, cf. also Vallat 1993: 221). It is worth investigating whether Pišanne is the ancient name of modern Deh-i Now. There is no proof that the latter is the site of ancient Hupšen (see Potts 2016: 225).
- 7 E.g., *nu-ur ki-ip-ra-at*, i.e. *nūr kibrāti* “light of the world” (see Steve, MDP 41 43 *ad* 21, 2, 5). Interestingly enough, it is the earliest occurrence of this royal epithet, which is not recorded in Mesopotamia before Esarhaddon (it resembles a divine epithet in an inscription of Šamši-Adad V, 823–811 BC, cf. CAD N/2: 348–349, s.v. nūru A, a, 1st example and c). For a possible Akkadian loanword (*šarratum*) in an Elamite inscription of Šutruk-Nahhunte I, see Kozuh 2014: 132.
- 8 See Paulus 2013: 438–441. The theonym ^d*Im-mé-ri-ia* is not attested elsewhere; it looks Akkadian.
- 9 The site was not abandoned after it had ceased to be the capital: it recurs in a list of towns from Susiana from Ashurbanipal's time (mid-640s BC, Parpola 1970: 115, s.vv. Dūr-Undasi and Dūr-Undasima, NA, presumably referring to an upper and lower town).
- 10 If the above-mentioned enumeration in the Assyrian chronicle, viz. Zabban, Irriya and Ugār-Sallu, is based on an itinerary (from south to north), then there is no proof that Irriya was very close to the Little Zab (cf. Nashef 1982a: 138). Māt-Irriya is recorded in three boundary stones. Illiliya, the governor (*šakin mātī*) of Māt-Irriya and Burrattaš, is mentioned in two of them. Burrattaš and the Karzi-yabku clan were linked to Halman, southeast of the Diyāla (see Nashef 1982a: 62, 75, 115). A passage with topographical information is Paulus 2014: 480 (= Lambert 2011), i, 6–12: ^{md}EN.LÍL'-ia DUMU ^m*kar-zi-ia-ab-ku i-na uru-nu-zī* ⁷KUR ^{uru}*ir-re-e-a* A.GÀR ^{uru}*ar-rap-ha* ^{8lu.kur}*ha-ab-ha-A+A-u <ša>* ⁱ⁷*za-ba-an* ⁹*i-bi-ru-am-ma hu-ub-ta ih-bu-tú* ¹⁰^{md}EN.LÍL'-ia DUMU ^m*kar-zi-ia-ab-ku* ¹¹GAR.KUR ^{uru}*bur-rat-taš ù* KUR *ir-re-e-a ig-ri-ma* ¹²*hu-ub-ta i-ki-me di-ik-ta-šú-nu i-du-uk* “(As for) Illiliya, descendant of Karzi-yabku – Illiliya, descendant of Karzi-yabku, the governor of Burrattaš and Māt Irriya, made war against the Habheans, <who> had crossed over the Zaban river (= Little Zab) and engaged in plundering, (but) he (Illiliya) took away the booty and slaughtered them in (the town of) Nuzi, in the land of Irriya, (irrigation) district of Arrapha”. It is arguable that the odd

syntax is due to the focus on the grantee, Illiliya, and the place where he repelled the Habhean enemy. A rendering “in (the city) of Nuzi ... the ruler of Habhi crossed the Zaban river and engaged in plundering” (following the translations of Lambert 2011 and Paulus 2014) is questionable seeing that Nuzi is not situated on the Little Zab or any river, but on a wadi.

- [11](#) König 1965: 132: 54a, 3. Hinz and Koch (1987: 1003), following König (1965: 132, n. 10 *ad loc.*) aptly render “Gebirgspass von Š.”, but present an incorrect parsing, viz. *ni-ri* and *bu-ni*. The *-ni* of *Ni-ri-pu-ni* is the same as *-ni* of *^{aš}Ū-ka₄-ar-si-il-la-am-ni* E-be-eh (above, B, incorrectly parsed by Hinz and Koch 1987: 1243 who were not yet aware of the occurrences of *^{aš}Ū-ka₄-ar-si-el-la-am* in unpublished inscriptions of Šilhak-Inšušinak I quoted by Vallat 1993: 291, s.v. Ukarsillam). Both toponyms are genitive compounds with the Elamite clitic – *ni* which is used as a genitive case marker (cf. Khačikjan 1998: 65), whose position is irregular. The regular position of *-ni* is at the end of the compound, cf. ME *na-ap-p[i-ip] Ha-tàm-ti-[i]p-ni* “the gods of Elam” in an inscription of Šilhak-Inšušinak I (König 1965: 131: 54, 70) and *gu-gu-un-nu-um ^dIn-su-uš-na-ak-ni* “Inšušinak’s ziqqurra” in an inscription of Hutelutuš-Inšušinak (König 1965: 139: 61B, iii). In both toponyms *-ni* penetrated the complex and follows its 1st component as if it stands in the place of Akkad. *ša*.
- [12](#) See Paulus 2014: 160–161 *ad* 511–514: NKU I, 3, cf. Vallat 1993: 57, s.v. Din-šarri and Brinkman 1986: 200.
- [13](#) These texts, edited by Prof. Eleanor Robson (UCL), are displayed on the website of Tall Hēbar (“Tell Khaiber” = TK): <http://discovery.ucl.ac.uk/1476498/> (cf. www.urarchaeology.org/tell-khaiber). They are from the period of the “first dynasty of the Sealand” (for Elamites and other foreigners in unprovenanced texts from that period, see Zadok 2014a). Explicitly Elamites (^{lu}ELAM.MA, with Akkadian names):

A-ta-na-ah-ì-lí (TK 1096.47, rev. 25), mentioned before ^fE-re-ši-mu-ut (also TK 1114.36, rev. 16); Ga-mi-lu-še-mi (TK 1114.40, 11), and x-su-ba-nu-tum (TK 3064.135, rev. 6'). Bearers of Elamite names are Me-er-ri-hal-ki (text DI, TK 3080.04, 16', cf. Zadok 1984: 9:23; 28: 142b) and Ka-ra-pu-ni (TK 1096.47, rev. 33). Šil-lí-^dši-mu-ut (TK 3064.108, rev. 3) is hybrid (Akkado-Elamite); cf. ^fx-x-^dsi-mu-ut (TK 3080.86, rev. 2) and [...-x]-ub-te-er s. of ^dSi-mu-ut[...] (TK 3064.063, rev. 7).
- [14](#) Tilmunites: An-zak-GAL^{at} (TK 3064.051, 12), An-zak-ga-[mil] (TK 1096.48, 22', father of I-din-^dIŠKUR), and An-zak-...] (father of -lí-ŠEŠ?-SUM, TK 1114.40, rev. 8).

Kassites: [Bu-ur]-ra-šu-ga-ab (TK 1096.58, flake 1, 6') and x-x-ra-sa-ah (TK 3064.076, rev. 2). The theophorous element of Bu-ur-ra-Ṭa-ba-an (TK 1096.48, 7')/ Bu-ur-ra-Ṭa-ba-ni (TK 3064.033, 13) is the deified river name Ṭaban, which is elsewhere contained only in Akkadian and Sumerian anthroponyms (see Nashef 1982b: 118–119, 121 and add Ṭa-ba-an-ni-a-li?, MDP 22 99, rev. 5', presumably / Ṭaban-alī/ from OB Susa). The river is in the Diyāla basin; Bu-ur-ra-Ṭa-ba-an perhaps refers to an individual who originated from there. The only West Semite is ^fSú-ti-i-tum (TK 3080.27, 14'), that is, “the Sutean lady”.

References

- Abdi, K. and Beckman, G. 2007. An Early Second-Millennium Cuneiform Archive from Chogha Gavaneh, Western Iran. *JCS* 59: 39–91.
- Álvarez-Mon, J. 2013a. Khuzestan in the Bronze Age. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford:

- Oxford University Press, 217–232.
- . 2013b. Braids of Glory. Elamite Sculptural Reliefs from the Highlands: Kül-e Farah IV, in De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives: Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. MDP 58. Leiden: Brill, 207–248.
- Anthonzio, S. and Malbran-Labat, F. 2013. Approche historique et philologique du titre royal likame/we rišakki. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives: Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. MDP 58. Leiden: Brill, 417–428.
- Balkan, K. 1954. *Kassitenstudien.1: Die Sprache der Kassiten*. AOS 37. New Haven, CT: American Oriental Society.
- Boehmer, R.M. and Dämmer, H.-W. 1985. *Tell Imlihiye, Tell Zubeidi, Tell Abbas*. Baghdader Forschungen 7. Mainz: von Zabern.
- Börker-Klähn, J. 1970. *Untersuchungen zur altelamischen Archäologie*. Dissertation. Berlin: Freie Universität.
- Braun-Holzinger, E.A. 1991. *Mesopotamische Weihgaben der frühdynastischen bis Altbabylonischen Zeit*. HSAO 3. Heidelberg: Heidelberg Orientverlag.
- Brinkman, J.A. 1968. *A History of Post-Kassite Babylonia*. AnOr 43. Rome: Pontifical Biblical Institute.
- . 1986. The Elamite-Babylonian Frontier in the Neo-Elamite Period, 750–625 B.C. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta Historiae Elamicae. Mélanges offerts à M.-J. Steve*. Paris: Recherches sur les civilisations, 199–207.
- . 1993–1997. Meerland (Sealand). *RIA* 8: 6–10.
- Carter, E. and Stolper, M.W. 1984. *Elam: Surveys of Political History and Archaeology*. Berkeley: University of California Press.
- Cavigneaux, A. and Ismail, B. Kh. 1990. Die Statthalter von Suhu und Mari im 8. Jh. V.Chr. *BaM* 21: 321–456.
- De Graef, K. 2013. The Use of Akkadian in Iran. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press, 263–282.
- van Dijk, J. 1986. Die dynastischen Heiraten zwischen Kassiten und Elamern: eine verhängnisvolle Politik. *OrNS* 55: 159–170.
- Edzard, D.O. – Farber, G. 1974. *Die Orts- und Gewässernamen der Zeit der 3. Dynastie von Ur*. Répertoire Géographique des Textes Cunéiformes 2. Wiesbaden.
- Eidem, J. and Laessoe, J. 2001. *The Shemshara Archives 1: The Letters*. The Royal Danish Academy of Sciences and Letters, Historisk-fil. Skrifter 23. Copenhagen: Munksgaard.
- Farber, W. 1974–1975. Eine elamische Inschrift aus der 1. Hälfte des 2. Jahrtausends. *ZA* 64: 74–86.
- Fincke, J. 1993. *Die Orts- und Gewässernamen der Nuzi-Texte*. Répertoire Géographique des Textes Cunéiformes 10. Wiesbaden: Reichert.
- Frayne, D.R. 1992. *The Early Dynastic List of Geographical Names*. AOS 74. New Haven, CT: American Oriental Society.
- Fuchs, A. 2011. Das Osttigrisgebiet von Agum II. bis zu Darius I (ca. 1500 bis 500 v.Chr.). In: Miglus, P. and Mühl, S. (eds.) *Between the Cultures: The Central Tigris Region from the 3rd to the 1st Millennium BC*. HSAO 14. Heidelberg: Heidelberg Orientverlag, 229–320.
- Gasche, H. 2013. Transferts culturels de la Babylonie vers Suse au milieu du 2e millénaire av. n. ère. In: De Graef, K. and

- Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives: Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. MDP 58. Leiden: Brill, 71–82.
- Gassan, M. 1986. Une inscription cassite d'Iran. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta Historiae Elamicae. Mélanges offerts à M.-J. Steve*. Paris: Recherche sur les civilisations, 187–189.
- Gelb, I.J., MacRae, A.A. and Purves, P.M. 1943. *Nuzi Personal Names*. OIP 57. Chicago: The Oriental Institute of the University of Chicago.
- Grayson, A.K. 1996. *Assyrian Rulers of the Early First Millennium B.C., II (858–745 B.C.)*. RIMA 3. Toronto: University of Toronto Press.
- Heessel, N.P. 2012. *Divinatorische Texte 2: Opferschau-Omina*. WVDOG 139. Ausgrabungen der Deutschen Orientgesellschaft in Assur 9. Keilschrifttexte aus Assur literarischen Inhalts 5. Wiesbaden: Harrassowitz.
- Heimpel, W. 2009. The Location of Madga. *JCS* 61: 25–61.
- Hinz, W. and Koch, H. 1987. *Elamisches Wörterbuch* 1–2. AMI Ergänzungsheft 17. Berlin: Reimer.
- Hölscher, M. 1996. *Die Personennamen der Kassitenzeitlichen Texte aus Nippur*. Imgula 1. Münster: Rhema.
- Jakob, S. 2009. *Die mittellassyrischen Texte aus Tell Chuēra in Nordost-Syrien*. Vorderasiatische Forschungen der Max Freiherr von Oppenheim-Stiftung 2. Wiesbaden: Harrassowitz.
- Jaritz, K. 1957. Die kassitischen Sprachreste. *Anthropos* 52: 850–898.
- Khačikjan, M. 1998. *The Elamite Language*. Documenta Asiana 4. Rome: Consiglio Nazionale delle Ricerche. Istituto per gli Studi Micenei ed Egeo-Anatolici.
- König, F.W. 1965. *Die elamischen Königsinschriften*. AfO Beih. 16. Graz: Weidner.
- Kozuh, M. 2014. Elamite and Akkadian Inscribed Bricks from Bard-e Karegar (Khuzistan, Iran). In: Kozuh, M., Henkelman, W.F.M., Jones, C.E. and Woods, Ch. (eds.) *Extraction & Control: Studies in Honor of Matthew W. Stolper*. SAOC 68. Chicago: Chicago University Press, 131–62.
- Lambert, W.G. 2011. Another Boundary Stone of Merodachbaladan I. *AfO* 52: 15–21.
- Leemans, W.F. 1946. Kidinnu, un symbole de droit divin babylonien. In: David, M., van Groningen, B.A. and Meijers, B.M. (eds.) *Symbolae ad jus et historiam antiquitatis pertinentes Julio Christiano van Oven dedicatae*. Leiden: Brill, 36–61.
- McCarthy, A.R. and Hill, J. 2009. Emblems of Ethnicity: Hurrians, Elamites and the Mittanian “Common Style” Glyptics. In: Wilhelm, G. (ed.) *General Studies and Excavations at Nuzi in Honor of David I. Owen on the Occasion of His 65th Birthday October 28, 2005*. SNH 18. Bethesda, MD: CDL Press, 299–322.
- Mofidi-Nasrabadi, B. 2005. Eine Steininschrift des Amar-Suena aus Tappe Bormi (Iran). *ZA* 95: 161–171.
- Nashef, Kh. 1982a. *Die Orts- und Gewässernamen der mittelbabylonischen und mittellassyrischen Zeit*. Répertoire Géographique des Textes Cunéiformes 5. Wiesbaden: Reichert.
- . 1982b. Der Ṭaban-Fluss. *BaM* 13: 117–141.
- Neumann, G. 2013. Elams Kulturkontakte mit seinen Nachbarn im Spiegel der Glyptik des 2. Jahrtausends v.Chr. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives: Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. MDP 58. Leiden: Brill, 83–128.
- Osellini, V. 2016. Traces of Elamite and Mittani Culture in the Hamrin Basin: the Case of Fine Pottery in the Kassite Contexts

- of Tell Yelkhi, in Foietta, E. *et al.* (eds.) *Cultural and Material Contacts in the Ancient Near East. Proceedings of the International Workshop 1–2 December 2014, Torino*. Sesto Fiorentino, 36–45.
- Parpola, S. 1970. *Neo-Assyrian Toponyms*. AOAT 6. Kevelaer.
- Paulus, S. 2013. Beziehungen zweier Grossmächte – Elam und Babylonien in der 2. Hälfte des 2. Jahrtausend v.Chr. Ein Beitrag zur internen Chronologie. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives: Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. MDP 58. Leiden: Brill, 429–449.
- . 2014. *Die babylonischen Kudurru-Inschriften von der kassitischen bis zur frühneubabylonischen Zeit: untersucht unter besonderer Berücksichtigung gesellschafts- und rechtshistorischer Fragestellungen*. AOAT 51. Münster: Ugarit Verlag.
- Potts, D.T. 2016. *The Archaeology of Elam: Formation and Transformation of an Ancient Iranian State*. Cambridge World Archaeology. 2nd ed. Cambridge: Cambridge University Press.
- Richter, Th. 2016. *Vorarbeiten zu einem hurritischen Namenbuch. 1. Personennamen altbabylonischer Überlieferung vom Mittleren Euphrat und aus dem nördlichen Mesopotamien*. Wiesbaden: Harrassowitz.
- Sassmannshausen, L. 2001. *Beiträge zur Verwaltung und Gesellschaft Babyloniens in der Kassitenzeit*. Baghdader Forschungen 21. Mainz: von Zabern.
- Sigrist, M. 2000. *Texts from the Yale Babylonian collections 1 (1–1176), 2 (1177–2223)*. Sumerian archival texts 2, 3 (respectively). Bethesda: CDL press.
- van Soldt, W.H. 2015. *Middle Babylonian Texts in the Cornell University Collections*. CUSAS 30. Bethesda: CDL.
- Steve, M.-J., Vallat, F. and Gasche, H. 2002–2003. Suse. F. Suse dans l'histoire. *Supplément au Dictionnaire de la Bible*, fasc. 74. Paris: Letouzey & Ané, 403–530.
- Stolper, M.W. 2013. Sugirs of Anšan. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives: Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. MDP 58. Leiden: Brill, 399–415.
- Streck 1998–2001. Nakkab. *RIA* 9: 91.
- Tavernier, J. 2016. Syro-Asianica Scripta Minora X. III. The Meaning of Elamite men. *Le Muséon* 129: 10–16.
- Vallat, F. 1980. *Suse et l'Elam*. Recherche sur les grandes civilisations. Études elamites, Mémoire n° 1. Paris: Éditions ADPF.
- . 1990. Deux inscriptions royales en élamite de l'époque des Épartides (sukkalmah). *NABU* 1990/137.
- . 1993. *Les noms géographiques des sources suso-élamites*. Répertoire Géographique des Textes Cunéiformes 11. Wiesbaden: Reichert.
- . 1998. Elam I. The History of Elam. *Encyclopaedia Iranica* 8, 302–313.
- . 1999. Succession royale en Elam au II^{ème} Millenaire. In: Gasche, H., Tanret, M., Janssen, C. and Degraeve, A. (eds.) *Cinquante-deux reflexions sur le Proche-Orient Ancien offertes en hommage à Léon De Meyer*. MHEO 2. Leuven: Peeters, 1–14.
- . 2003. Suse.G.1. La religion suso-élamite. *Supplément au Dictionnaire de la Bible*, fasc. 74. Paris: Letouzey & Ané, 529–553 (and the abbreviations and bibliography on 619–652).
- Zaccagnini, C. 1979. *The Rural Landscape of Arraphé*. Quaderni di geografia storica 1. Rome: Università di Roma, Istituto di

studi del vicino Oriente.

Zadok, R. 1984. *The Elamite Onomasticon*. Supplement 40 to AION 44/3. Naples: Istituto Orientale.

———. 1987. Peoples from the Iranian Plateau in Babylonia During the Second Millennium B.C. *Iran* 25: 1–26.

———. 1991. Elamite Onomastics. *SEL* 8: 225–237.

———. 1994. Elamites and Other Peoples from Iran and the Persian Gulf Region in Early Mesopotamian Sources. *Iran* 32: 31–51.

———. 2012. The Aramean Infiltration and Diffusion in the Upper Jazira, 1150–930 B.C.E. In: Galil, G., Gilboa, A., Maeir A.M. and Kahn, D. (eds.) *The Ancient Near East in the 12th-10th Centuries BCE: Culture and History: Proceedings of the International Conference, Held at the University of Haifa, 2–5 May, 2010*. AOAT 392. Münster: Ugarit Verlag, 569–579.

———. 2014a. On Population Groups in the Documents from the Time of the First Sealand Dynasty. *Tel Aviv* 41: 222–237.

———. 2014b. Hīt in Sūhu. *Kaskal* 11: 1–22.

CHAPTER SIXTEEN

Elam and Assyria



Peter Dubovský

The history of Assyrian-Elamite relations

Traditionally the history of the Neo-Elamite kingdom has been divided into three periods (Waters 2000: 3–4; Gorris and Wicks, Chapter 13 in this volume). If we consider Elam from an Assyrian point of view, however, four phases and one interlude may be distinguished as outlined below.

Phase I (before 823 BCE) – No records

In this phase, Elam is completely absent from the extant Assyrian sources. While this silence is understandable for the greater part of the Middle Assyrian period, it becomes surprising in view of the well-documented campaigns conducted in the east by several Neo-Assyrian kings, such as Tiglath-pileser I (1115–1076) and Tukulti-ninurta II (891–884). Even more striking is the absence of Elam in the inscriptions of Ashurnasirpal II (884–859) and Shalmaneser III (859–824), which detail their campaigns in zones bordering on Elamite territory. From these sources it can be inferred that Elam was virtually non-existent for Assyria, presenting no serious opposition to Assyrian expansionistic interests.

Phase II (823–745 BCE) – On the Assyrian radar screen

Elam appears for the first time in inscriptions dated to the reign of Shamshi-Adad V (823–811). When this monarch conducted his fourth and most important campaign against Babylonia in the year 819, the Babylonian king Marduk-balatsu-iqbi mustered troops from various countries, among them Elam, to halt the Assyrian expansion to the south. This anti-Assyrian coalition was defeated (RIMA 3 A.0.103.1 iv 37–45), and a letter from the god Aššur mentions that the people from along Assyria's eastern frontier subsequently escaped to Elam (SAA III

Phase III (745–695 BCE) – A barking dog

With Tiglath-pileser III began a new phase of Elamite-Assyrian relations that lasted until Sennacherib's invasions of Elam in 694–689. Assyrian kings expanding their territory eastwards invaded Babylonia and occupied the Elamite-Babylonian buffer zone. In this phase Elam engaged in various subversive activities, welcoming Babylonian political refugees, offering military support to Babylonian rebels, and even directly engaging in military conflicts with Assyria.

Tiglath-pileser III

Tiglath-pileser III's (745–727) royal inscriptions mention Elam twice (RINAP 1 47:14; 51:17), and an additional three references are found in letters dated to his reign (SAA XIX 82; 127; 140). Tiglath-pileser III's expansion eastwards in 731–729 met with the strong resistance of both Aramaean and Chaldean tribes led by Mukin-zeri of the Bit-Amukani tribe. Tiglath-pileser employed a strategy of isolating the center of the rebellion from its allies; one that had proved efficient in his campaigns against Damascus and Samaria (Dubovský 2006b: 161–164). Thus, he conquered the tribe Puqudu and the cities Lahiru, Hilimmu and Pillatu along the Elamite western frontier and placed them under the authority of the provincial governor of Arrapha (RINAP 1 47:14).

Even though Tiglath-pileser III's royal inscriptions do not mention the direct involvement of the Elamite king Humban-nikaš I (743–717) in the anti-Assyrian revolt, certain Neo-Assyrian letters report that he was partly involved in the Babylonian-Assyrian confrontation. SAA XIX 82, dated probably to 731, illustrates the nature of the Elamite-Assyrian conflicts in this period. The letter reports on a dispute over control of a strategic bridge, most likely on the river Tubliaš. We learn that the governor of Arrapha had turned the anti-Assyrian military commander Zineni away from the bridge. Upon hearing this news, the Elamite king and his troops travelled to the bridge and crossed it, facilitating Zineni's crossing behind, and then camped in the forest among the Aramaeans. Soon afterwards, control of the bridge passed again into Assyrian hands. Letter SAA XIX 127 mentions subversive activity on the part of the Elamite king and Mukin-zeri's son, who had killed a number of soldiers and carried out deportations. These Elamite efforts to sustain the rebels militarily and diplomatically (SAA XIX 140) would ultimately fail to prevent Tiglath-pileser III from conquering Babylonia.

Sargon II

Three important conflicts between Elam and Assyria are dated to the reign of Sargon II (722–705). The first clash of arms took place in 720 at Der. Sargon II claimed to have defeated the Elamite-Babylonian coalition (Fuchs 1994: 88–89, 197), but in fact the outcome was much more ambiguous than described in his annals (Potts 1999: 264). On the contrary, ABC 1 i 33–37 reports that the Elamite king Humban-nikaš I inflicted a crushing defeat on Sargon II (Grayson 1965: 340–342). This battle not only established a balance of power between Assyria and Elam but confirmed Elam's new policy of openly siding with Babylonia and engaging in war with Assyria.

Ten years later (710–709) Sargon II conducted a massive offensive against the Babylonian rebel Marduk-aplu-idinna (722–710, 703), known also as Merdoch-baladan (Waters 2000: 16–24). Sargon opted for a strategy used earlier by Tiglath-pileser III: before attacking the city of Babylon, he led his troops along the western frontier of Elam on the east of the Tigris (Fuchs 1994: 399–405, 431–432), a region occupied by Aramaean tribes under Elamite influence. Sargon conquered the fortress of Dur-Athara in Gambulu and the territory of the Aramaean tribes Puqudu, Ru'ua and Hindaru, permitting Assyrian troops to enter territories directly controlled by Elam for the first time. The territory between the Tubliaš and Ulaia rivers occupied by the Aramaean tribe Iadburu belonged to the Elamite sphere of influence, having been secured by the Elamite king Šutruk-Nahhunte II (717–699), who established and manned fortresses Sam'una and Bab-duri. Sargon II crossed the Tubliaš river, stormed both fortresses and deported two Elamite fortress commanders, Singamšibu and Sa[...]na, together with 7,520 Elamite soldiers. This was the first major defeat of the Elamite troops described in detail in the Neo-Assyrian royal inscriptions. Sargon attached the Iadburu region to the Gambulu province (Fuchs 1994: 150–151, l. 295–301), and Elam lost control over all of the Aramaean territories east of the Tigris (Dubovský 2006a: 84–87), which were incorporated into the newly established Assyrian Gambulu province just a few kilometers from the Elamite capital, Susa. Finally, Sargon conquered the Raši territory which bordered on Der, and Šutruk-Nahhunte retreated to avoid direct military confrontation. The Assyrian king subsequently secured the city of Der, opening access to Ellipi, another Elamite-controlled territory.

The third open military clash between Assyria and Elam arose over control of Ellipi in 708–707 (Fuchs 1998: 112–123; Dubovský 2006a: 75–83). After the death of Ellipi's pro-Assyrian king, Dalta, his nephews Nibe and Ašpa-bara involved the Ellipian kingdom in a civil war. Šutruk-Nahhunte took advantage of the succession war by offering military aid to Nibe, and after having installed him on the throne, sending 4,500 Elamite bowmen to protect the Ellipian capital Murabištu. Sargon immediately responded by sending his troops in support of Ašpa-bara. Murabištu was conquered, Nibe was expelled and Ašpa-bara became the Assyrian vassal in Ellipi. By the end of Sargon II's reign, Elam's direct control in the Zagros area had shrunk to the territories along the Ulaia river.

Sennacherib

Similarly to the pattern of hostility observed during the reign of Sargon II, the military confrontation between Elam and Assyria during Sennacherib's reign (705–681) was intrinsically connected with the rebellions in Babylonia. Sennacherib conducted three major assaults in the east amounting to a total of six campaigns.

The first involvement in the region dates to 704–702 (first campaign; RINAP 3/1 1:5–62). Marduk-apla-idinna returned from Elam and, taking advantage of Sargon II's death, seized the city of Babylon. Without hesitation, Sennacherib marched against Babylonia. In return for a large sum of money, Šutruk-Nahhunte offered military support to the Babylonian rebels, dispatching his generals and ten commanders together with 80,000 archers, [850] wagons and horses. An element of the coalition was defeated by Sennacherib at Cutha in 703, whereupon the Elamite military hero Nergal-nasir was captured together with other unit commanders, and Elamite archers, horses and wagons were taken as war booty. The Assyrians then defeated the forces of Šutruk-Nahhunte's third man Tannanu, who was commanding a unit composed of Elamites, Chaldeans and Aramaean soldiers. As a result, the coalition dissolved, Marduk-apla-idinna escaped, and Sennacherib looted his palace in Babylon. The following year Sennacherib's officials suppressed a rebellion, and Babylonia was left in the hands of Bel-ibni.

The peace did not last long, and in 700 (fourth campaign) Sennacherib was forced to intervene for a second time against Marduk-apla-idinna. RINAP 3/1 16 iv 63–64 mentions that Elam again offered support to the Babylonian rebels. Once again the coalition was defeated, Marduk-apla-idinna and his supporters escaped to Elam, and Sennacherib put his first-born son Aššur-nadin-šumi on the Babylonian throne.

Phase IV (694–631 BCE) – the conquest of Elam

The second part of Sennacherib's reign opens a new phase of Elamite-Assyrian relations in which Elam is no longer a distant kingdom supporting the Assyrian enemy but becomes the direct target of Assyrian campaigns. This phase commences with Sennacherib's sixth campaign in 694 and lasts until Ashurbanipal's conquest of Elam and his suppression of the last rebellions in 645.

Sennacherib's first invasions of Elam

The most important confrontation between Elam and Assyria took place between 694 and 689 (RINAP 3/1 22 iv 32-vi 35). Sennacherib decided to invade Elam (sixth campaign; 694) and break the backbone of Babylonian resistance. He mounted a naval operation that sailed down the Tigris in Phoenician ships to reach the Elamite regions in the marshes of the Persian Gulf

(^{ID}*marrati*, RINAP 3/2 46:51), which had been offering shelter to Babylonian refugees. After landing, Sennacherib reached the Ulaia river and defeated the Elamite-Babylonian army, stormed the Elamite cities and deported the runaways (RINAP 3/2 46:101–102). This victory in southern Elam, however, turned out to be a disaster for Assyria. While the Assyrian troops were busy in the south, the Babylonians involved the Elamite king Hallušu (699–693) directly in the battle, literally “dragging” him to Babylon (*ildudūnimma*; RINAP 3/1 34:28). *ABC* 1 ii 32–45 offers a detail conveniently omitted from the Assyrian sources: Hallušu attacked Assyria from the rear by assaulting the city of Sippar. With the help of the Babylonian rebels, he captured Sennacherib’s son Aššur-nadin-šumi, brought him to Elam and placed Nergal-ušeziḫ on the Babylonian throne. Nergal-ušeziḫ’s army, sustained by the Elamite troops, advanced southwards and captured Nippur. The rebels now, therefore, controlled northern and central Babylonia from Sippar to Nippur. When the Assyrian army sailed back from Elam, it found itself deadlocked between the Persian Gulf and the Elamite-Babylonian coalition, cut off from its homeland. Sennacherib sent more troops who defeated the coalition army supported by Hallušu and killed his son, captured the city of Uruk and advanced westwards to seize the Babylonian king Nergal-ušeziḫ near Nippur. Sennacherib deported Nergal-ušeziḫ to Nineveh and bound him at the Citadel Gate of Nineveh (RINAP 3/1 34:19b–36a).

Furious that his son was taken hostage and probably executed in Elam (cf. RINAP 4, 2), Sennacherib seized upon the opportunity of an insurrection against Hallušu to invade Elam for the second time (*ABC* 1 iii 7–12). He conquered and devastated its western regions, laying siege for the first time to the Elamite capital Madaktu (seventh campaign; 693), but the harsh winter conditions forced him to abandon the campaign. The new Elamite king Kutur-Nahhunte II (693–692) who had escaped to the mountains, returned to reconstruct the destroyed regions and brought back the survivors (RINAP 3/1 35:25’–27’).

The retreat of the Assyrian army served as an encouragement to the Babylonian rebels and Mušeziḫ-Marduk took the throne at Babylon. Faced with Sennacherib’s troops, he again sought refuge in Elam but this time was not welcomed. Upon his return, he managed to retake the kingship at Babylon and sent a large gift to the newly appointed Elamite king Humban-menana (692–689): “Gather your army, muster your forces, hurry to Babylon, and stand on our side! You are our hope.” (RINAP 3/1 22 v 35–37). The Elamite king accepted the gift and gave his military support to the rebels. A decisive battle took place at the city of Halule on the bank of the Tigris in 691 (eighth campaign), in which the Elamite army commanded by Humban-undaš was defeated. Humban-menana avoided direct battle, escaping from the battlefield, but Elamite magnates were captured alive and their possessions taken as booty. The defeat was described in detail:

“Like a flood in full spate after a seasonal rainstorm, I made their blood flow over the broad earth. The swift thoroughbreds harnessed to my chariot plunged into floods of their blood (just) like the river ordeal. The wheels of my war chariot, which lays criminals and villains

low, were bathed in blood and gore. I filled the plain with the corpses of their warriors like grass.” (RINAP 3/1 22 vi 3–10).

The battles in Babylonia lasted until 689 when Sennacherib finally conquered the city of Babylon and utterly destroyed it.

Esarhaddon

The assassination of Sennacherib in 681 gave rise to a wave of insurrections. At the outset of his reign, Esarhaddon (681–669) faced the same problem as his predecessors. Elamite involvement in anti-Assyrian activities at Babylon are first mentioned in relation to a conspiracy of a minor scale orchestrated by Nabu-ahhe-iddin, who sent gifts to obtain Elamite military support (Weidner 1954/55: 5–9). More serious was a rebellion centered on the city of Ur: in 680 Marduk-apla-idinna’s son Nabu-zer-kitti-lišir, labelled “rebel” and “insurgent” (RINAP 4 1 ii 54), emerged as the leader of anti-Assyrian insurgency and conquered the city. Esarhaddon responded by force and Nabu-zer-kitti-lišir, together with his brother Na’id-Marduk, escaped to Elam. Unexpectedly, Nabu-zer-kitti-lišir was executed here by the Elamite king Humban-haltaš II (681–675). Seeing the fate of his brother, Na’id-Marduk escaped and fled to Nineveh, begging for mercy and was named by Esarhaddon the king of the Sealand (Waters 2000: 37–40).

This policy of Esarhaddon calmed down tensions in Babylonia but failed to eradicate the anti-Assyrian sentiment, which the Elamite king Humban-haltaš willingly nourished. *ABC* 1 iv 9–10 reports that Humban-haltaš invaded Assyrian territory and raided the city of Sippar. The Elamites, who supported the insurrection of Marduk-apla-idinna’s son, Nabu-ušallim, aimed to take the Sealand and overthrow Na’id-Marduk. Letters SAA XVIII 86 and 87 report Elam’s attempt to transfer some of the frontier territories to Nabu-ušallim, pressuring the Aramaean tribes in the Sealand, but the tribes remained loyal to Esarhaddon.

Esarhaddon’s interlude: a non-aggression treaty

Relations between Assyria and Elam started changing in 676. In this year Bel-iqiša of the Gambulu tribe submitted to Assyria. In order to bring to an end to the instability in the Elamite-Assyrian frontier region, Esarhaddon reports that: “I strengthened the city Ša-pi-Bel, the city (which is) his strong fortress, and I put him together with his archers therein as a garrison and (thus) locked it (the fortress) up like a door against the land Elam.” (RINAP 4 1 iii 80–83).

The situation in Babylonia also changed. Esarhaddon’s support of the legitimate Babylonian king Na’id-Marduk was backed up by a sophisticated intelligence network. To help calm local tensions, the Assyrian king reinstated property that Babylonians had given to Elam in

exchange for military aid (Frame 1992: 71) and further boasts of having carried out significant reconstructions of Babylonian temples.

These factors paved the way for a new phase of relations between Elam and Assyria. The new Elamite king Urtak (675–664) concluded a bilateral treaty of non-aggression with Esarhaddon dated to 674: “So that there would be no trespassing on the borders of their countries they (the Elamites and Gutians) sent their messengers (with messages) of friendship and peace to Nineveh, before me, and they swore an oath by the great gods.” (RINAP 4 1 v 30–33; cf. also SAA IV 74:2–4). The extant documents do not report any Assyrian campaign against Elam in the later period of Esarhaddon’s reign, and it seems that this treaty transformed Assyrian-Elamite relations from open war to a situation of relative peace, as a letter sent by Esarhaddon to Urtak shows: “May Urtak, king of Elam, my brother, be well!” (SAA XVI 1:6). In sum, the decade 674–664 represents a short interlude of peaceful relations between Assyria and Elam regulated by the treaty of non-aggression, which according to the extant documents, is the only treaty concluded between both kingdoms.

Ashurbanipal’s conquest of Elam

The relative calm in Babylonia and the non-aggression treaty with Elam enabled Ashurbanipal (669–631) to resume the campaigns against Egypt that his predecessor Esarhaddon had started. With the Assyrians engaged in Egypt, Elam became involved again in an anti-Assyrian revolt (Gerardi 1987: 120–214). Bringing to an end ten years of peace, the Elamite king Urtak transgressed the treaty, enticed by his general Marduk-šumu-ibni into joining a coalition composed of Bel-iqiša, the chief of the Gambulu tribe, and Nabu-šumu-ereš, the governor of Nippur. A messenger of Ashurbanipal returning from Babylon reported that it had been taken by the rebels. In 664 Ashurbanipal marched to Babylonia (the first campaign against Elam; *BIWA* B §28–30). Urtak retreated with his troops, but Ashurbanipal pursued them, defeating the troops and driving Urtak back to the Elamite frontier. Urtak then died prematurely in Elam, and the country fell into anarchy, out of which emerged a new Elamite king: Te-umman (Waters 2000: 42–55).

Whereas Urtak’s involvement in the anti-Assyrian revolt, as well as his retreat, followed the typical pattern of the previous Elamite kings, Te-umman (664–653) opened a new last chapter of Assyrian-Elamite interaction by involving Elam directly in the war against Assyria (the second campaign against Elam; *BIWA* B §31–35; SAA III 31), and ultimately bringing the destruction of Elam (the end of the Neo-Elamite II period). After ascending to power in 664, Te-umman began to eliminate any pretenders to the throne. The remaining members of the royal family, among whom were Urtak’s sons Humban-nikaš and Tammaritu, and numerous dignitaries sought asylum in Assyria, bringing a great gift to Ashurbanipal. Ashurbanipal’s refusal to return the runaways at Te-umman’s behest resulted in the exchange of a series of

angry messages, and in 653 Te-umman began to mobilize his troops. After having received the confirmation from the gods, Ashurbanipal attacked Te-umman's troops at Til-Tuba, on the banks of the river Ulaia. Being better equipped, as depicted on the reliefs, the Assyrian troops trounced the Elamite army; Te-umman was captured and beheaded and his son Tammарitu killed. Immediately after the defeat Ashurbanipal attacked Te-umman's ally Dunanu, chief of the Gambulu tribe (*BIWA* B§36–41). The Assyrian troops returned with immense booty to Nineveh, and Dunanu entered the city with Te-umman's head hanging around his neck. In contrast to the treaty concluded between Urtak and Esarhaddon, described as an agreement of friendship and peace (*mār šiprātišunu ša tūbi u sulummê*, literally “messengers of good and peace”) and oath-taking (*ša ... izkurū*, literally “they swore”) (*RINAP* 4 1 v 31, 33), Ashurbanipal's victory transformed Elam into one more fully-fledged vassal state bound to Assyria by means of an *adê*-treaty (*BIWA* B vii 6).

Ashurbanipal entrusted Elam to the sons of Urtak who had been living in exile in Assyria. The oldest, Humban-nikaš II, was installed on the throne of Madaktu and Tammарitu I on the throne of Hidalu. This arrangement proved to be short-lived, and Elam was soon immersed in a series of insurrections and wars that ravaged the country for five years. Shortly after being installed on the throne, Humban-nikaš II (653–652) received a bribe from Ashurbanipal's brother Šamaš-šumu-ukin and joined the anti-Assyrian revolt in Babylonia. He not only helped mobilize troops in Babylonia but also urged Undasi, Te-umman's son who had survived the battle at Til-Tuba, to avenge his father's death by joining the anti-Assyrian campaign (*BIWA* B vii 23–24). Ashurbanipal assaulted the rebels in a battle in 652 at Hiritu in the Diyala region (the third campaign against Elam; *BIWA* B§42–50) and the Babylonian-Elamite coalition was once again defeated. Undasi and his generals were decapitated. After the crushing defeat of the coalition, Ashurbanipal sent messengers to Humban-nikaš II, but received no answer. The defeat, coupled with the Assyrian pressure on Elam, triggered an internal insurrection in which Humban-nikaš II was murdered by his nephew Tammарitu II (Potts 1999: 281). Tammарitu continued the support of Šamaš-šumu-ukin in the bloody civil war against Ashurbanipal, but when Šamaš-šumu-ukin was overthrown by Indabibi in 650, Tammарitu and his courtiers escaped to Assyria and kissed Ashurbanipal's feet, seeking mercy. Indabibi opted for peaceful relations with Assyria, releasing some Assyrian prisoners and paying tribute. When Ashurbanipal's appeals for the return of all runaways went unheeded, he determined to march against Elam. The approaching Assyrian army provoked the murder of Indabibi and installation of Humban-haltaš III (648–647), who continued the anti-Assyrian policy of his predecessors.

Meanwhile Babylon fell into Ashurbanipal's hands after two years of siege (650–648), and Šamaš-šumu-ukin died. After the conquest of Babylon, Ashurbanipal turned his full attention to Elam and conducted what was his fourth campaign to eradicate the remaining *nuclei* of resistance in Elam (*BIWA* F§18–24). Marching towards Elam, the Aramaean tribes

surrendered, and he easily conquered the Elamite outpost of Bit-imbi. The fortress commander was beheaded and the remaining members of Te-umman's family who had survived the bloodshed at Til-Tuba were deported to Assyria. This campaign made the situation in Elam even less stable. Humban-haltaš III residing in Madaktu was challenged by his rival Humban-habua residing in Babilu. Seeing the approaching Assyrian army both Humban-haltaš III and Humban-habua fled. Ashurbanipal entered the city of Susa and made his last attempt to reorganize Elam by appointing the former king Tammaritu II as king of Elam. However, his priming period at Nineveh proved insufficient, and shortly after his installation on the throne Tammaritu betrayed Assyria. The annals attribute his removal from the throne to the gods Aššur and Ištar. Even though Tammaritu humiliated himself and submitted to Assyria, Ashurbanipal did not reinstall him on the throne and Elam was left kingless.

Humban-haltaš III took advantage of the anarchy in Elam after the departure of the Assyrian troops and returned from his concealment to Madaktu, forcing Ashurbanipal to organize his fifth campaign against Elam in 647 (*BIWA* F§25–35). Humban-haltaš once again escaped from Madaktu as the advancing Assyrian army conquered one Elamite city after the other, including the royal residences Madaktu, Babilu, Kabinak, Susa and Dur-undasi. Humban-haltaš fortified the fords of the river Idide in an attempt to stop the advancing Assyrian army, but after Ištar had appeared to his troops, Ashurbanipal crossed the river and Humban-haltaš III again fled. On his way back, Ashurbanipal returned to Susa, destroyed the ziggurat, looted the royal palaces and brought enormous booty to Nineveh.

Even though Prism F describes the conquest of Susa as the definitive conquest of Elam, the Assyrians needed two more years to set Elam in order. After the departure of Ashurbanipal's army, Humban-haltaš III returned from the mountains and again settled in Madaktu. The crucial role in suppressing the remaining opposition was played by Bel-ibni, the Assyrian general and governor of the Sealand, who made several minor invasions and raids aimed at disrupting the anti-Assyrian resistance in Elam (*ABL* 280, 281, 462, 792). Heavy Assyrian diplomatic pressure, combined with natural disasters (*ABL* 1000:5–11) and Bel-ibni's raids, provoked a revolt against Humban-haltaš III (*ABL* 281:20; 460:7). Meanwhile, Assyria sought the extradition of the former governor of the Sealand, Nabu-bel-šumati, the grandson of Merodach-Baladan – called prostitute, the reject of Bel, one cursed by the gods – who since 651 had been encouraging anti-Assyrian rebellions siding with Šamaš-šumu-ukin and imprisoning Ashurbanipal's soldiers. He made several incursions into Assyrian territory, capturing the brother of general Bel-ibni. Ashurbanipal made it clear that the suffering of the Elamites was due to their support for Nabu-bel-šumati. As a result of Assyrian pressure, Nabu-bel-šumati committed suicide or was murdered (*PNAE* 2/II, 81–814). Humban-haltaš III sent his corpse to Nineveh and then escaped to the mountains (*BIWA* A§61–63). Around 645 Humban-haltaš was captured, probably in Ellipi (BM 124794), and together with other rebels brought to Nineveh where he was publicly humiliated. His capture and the death of Nabu-bel-

šumati marked the end of Elamite resistance (Dubovský 2013). Ashurbanipal's final eradication of Elamite resistance and the looting of the capitals is presented as the end of Elam.

Summary

Assyrian kings expanding their control over eastern territories inevitably clashed with Elamite interests. The royal inscriptions report at least 17 military encounters between Assyria and Elam ([Table 16.1](#)), which can be divided into three groups: pitched battles, Assyrian invasions of Elam and battles against anti-Assyrian coalitions.

[Table 16.1 Reports on military encounters between Assyria and Elam in the royal inscriptions](#)

No.	Year	Assyrian King	Elamite King	Events	Type of conflict
1.	819	Shamshi-Adad V	unknown	Elam supported Babylonian king Marduk-balatsu-iqbi, the refugees went to Elam.	<i>Elam part of anti-Assyrian coalition</i>
2.	731–729	Tiglath-pileser III	Humban-nikaš I	Assyrians controlled Elamite western frontier.	No resistance mentioned in the NA inscriptions.
3.	720	Sargon II	Humban-nikaš I	According Assyrian sources Sargon won, according to <i>ABC</i> ₁ Sargon lost.	Direct confrontation; Elam defeated according to NA sources.
4.	710	Sargon II	Šutruk-Nahhunte II	Assyrians captured Elamite fortresses and regained the control over Elamite western frontier. Šutruk-Nahhunte II avoided a direct battle in the Raši region.	<i>Elam part of anti-Assyrian coalition</i>
5.	708–707	Sargon II	Šutruk-Nahhunte II	Elam provided soldiers to protect Ellipian capital Murabištu. Assyrians captured the city.	<i>Elam part of anti-Assyrian coalition</i>

6.	704–702	Sennacherib	Šutruk-Nahhunte II	Elam supported Marduk-apla-idinna's revolt by providing soldiers. Assyrians defeated the troops under the Elamite command at Cutha.	<i>Elam part of anti-Assyrian coalition</i>
7.	700	Sennacherib	Šutruk-Nahhunte II	Elam offered military support to Marduk-apla-idinna.	<i>Elam part of anti-Assyrian coalition</i>
8.	694	Sennacherib	Ḫallušu	Assyria stormed southern Elam; counter-attack of the Elamites; Sennacherib's reconquering of Babylonia.	Invasion
9.	693	Sennacherib	Kutur-Nahhunte II	Invasion of Elam, Kutur-Nahhunte II escaped, the first siege of the Elamite capital Madaktu.	Invasion
10.	691	Sennacherib	Ḫumbanmenana	Babylonian-Elamite coalition defeated at Halule.	<i>Elam part of anti-Assyrian coalition</i>
11.	680	Esarhaddon	Humban-haltaš II	Supporting Babylonian rebels (minor skirmishes); Humban-haltaš II executed Nabu-zer-kitti-lišir.	<i>Elam part of anti-Assyrian coalition</i>
12.	676	Esarhaddon	Humban-haltaš II	Assyria secured Elamite frontier by setting up the fortress Ša-pi-Bel.	Invasion
	675	Esarhaddon	Urtak	Non-aggression treaty	
13.	664	Ashurbanipal	Urtak	Assyria defeated Babylonian-Elamite coalition.	<i>Elam part of anti-Assyrian coalition</i>
14.	653	Ashurbanipal	Te-umman	Elam was defeated at Til-Tuba, Te-umman was executed.	Direct confrontation
15.	652	Ashurbanipal	Humban-nikaš II	Assyria defeated Elamite-Babylonian coalition led by Šamaš-šumu-ukin at Hiritu.	<i>Elam part of anti-Assyrian coalition</i>
		Ashurbanipal	Indabibi	Peace with Assyria	
16.	648	Ashurbanipal	Humban-haltaš III and Humbarhabua	Conquest of Bit-Imbi; the Elamite kings escaped; Ashurbanipal entered Susa.	Invasion
17.	647	Ashurbanipal	Humban-haltaš III	The Elamite king escaped, Assyrians looted Susa and other cities.	Invasion

According to the royal inscriptions, the Assyrian and Elamite armies met in pitched battles only twice: in 720 Sargon II fought against Humban-nikaš I at Der and in 653 Ashurbanipal faced Te-umman at Til-Tuba. Whereas the results of the former were more than ambiguous,

the latter represented the striking defeat of the Elamite royal army (*BIWA* B§31–35).

The second group of Assyrian-Elamite clashes is represented by the Assyrian invasions and conquests of the territories directly or indirectly controlled by Elam. The first Assyrian interference in Elamite affairs took place when Tiglath-pileser III took control over the western frontier that was under the Elamite sphere of influence (Brinkman 1986). This frontier, in fact, moved back and forth between Assyria and Elam a number of times (cf. *RINAP* 3/1 22 iv 55–61). A more serious interfering episode was the invasion of southern Elam by Sennacherib. The most severe intrusions were Assyrian invasions into the heartland of Elam resulting in conquest of the Elamite capitals Madaktu and Susa.

The above survey of Elamite-Assyrian relations pointed out that the most important characteristic of Elam through phases II – IV was its continuous support of anti-Assyrian rebels, in particular the Babylonians. Elam's siding with Babylonia was indeed a shift in Elamite international policy. Whereas in the second millennium, Babylonia and Elam had been often on antagonist terms, the rise of a common enemy Assyria – caused the two arch-enemies to become allies (Brinkman 1968: 315–318). Elamite support for the rebels came in the form of military help and in the providing of safe haven to political asylum seekers.

The first indication of Elamite military support to the Babylonian rebels is documented in the annals of Šamši-Adad V. The Babylonian king Marduk-balatsu-iqbi rallied the lands of Chaldea, Elam, Namri and Aram, employing the verb *dekû* “to call up, levy” (*RIMA* 3 A.0.103.1 iv 40). The capacity of the Babylonian king to muster Elamite troops changed and in the later period Elamite support was not given for free. Thus when Marduk-apla-idinna approached Šutruk-Nahhunte II for help against Sargon II's invading troops in 710–709, he sent a gift (*kadrû*), that is, a bribe (*ta'atu*) to buy the Elamite king's assistance (Ann. I. 309). Sennacherib's scribes also underlined that in order to seal their friendship (*ibrûtu*), Marduk-apla-idinna gave Šutruk-Nahhunte II gold, silver and precious gems (*RINAP* 3/1 1:7). In exchange for these gifts, the Elamite kings provided the Babylonians with archers, horses, wagons, commanders and even their best warriors. On some occasions, the Elamite kings even accompanied their troops in person. Elamite military support significantly amplified the effectiveness of the anti-Assyrian resistance. The deployment of the troops of local governors was nowhere near sufficient to defeat it, necessitating the involvement of the Assyrian royal army.

The second characteristic of Elam was its willingness to offer safe haven to anti-Assyrian rebels, welcoming them since Shamshi-Adad V's reign (*RIMA* 3 A.0.103.4 21'–34'). The most glaring example was Marduk-apla-idinna, who escaped to Elam in 709 after Sargon II's conquest of Dur-Ladina (Ann. I. 305–307) and would flee repeatedly to Elam and return to Babylon until his death. During Sennacherib's assault of Babylonia, there was a massive exodus and the fugitives settled down in southern Elam. However, the rebels were not welcome in all cases. When Mušezib-Marduk escaped to Elam during Sennacherib's eighth

campaign, there was a conspiracy against him and he managed to return to Babylon (RINAP 3/1 22 v 26–30).

Elam according to Assyrian writings

Elam according to Assyrian royal propaganda

The previous section pointed out the complex relations between both kingdoms. Based on the nature of the evidence, it is only natural that the presentation of Elam in Neo-Assyrian royal inscriptions was highly charged with royal propaganda.

Not even Elam could resist Assyria!

According to the royal inscriptions, Assyria was always the victor and Elam always the defeated (see [Table 16.1](#)), illustrating that not even one of the most powerful kingdoms was able to resist Assyria. The image of Elam as the overcome was enhanced by the reported effects of the Assyrian victories. Thus, for example, Sargon II claimed that his conquest of the Ellipian capital manned by the Elamite archers “poured out upon the entirety of the land of Elam deathly silence (*šahrartu*)” (Fuchs 1994: 181). Similarly, Sennacherib’s inscriptions comment: “I poured out awe-inspiring brilliance upon his ally, the king of the land Elam (Šutruk-Nahhunte II)” (RINAP 3/1 16 iv 63–64). Esarhaddon claimed that even the obstinate rulers, including those of Elam, were filled with fear and terror (RINAP 4 1 v 26–29). In his letter to king Ashurbanipal, the god Aššur states that the Elamites trembled and shook before the king (SAA III 45:6’).

Positive interpretation

In order to emphasize the overwhelming superiority and bravery of the Assyrians, the royal scribes always lay a positive stress upon Assyrian campaigns. For this reason they did not hesitate to “adjust” the data (Laato 1995: 203–213). Thus Sargon’s scribes attributed victory at Der in 720 to Assyria, while according to Babylonian chronicles Sargon II had instead lost (*ABC* 1 i 33–37). Similarly, according to Tiglath-pileser III’s inscriptions, Elam had merely observed the Assyrian army marching along the border, whereas the letters point to a much less passive response, with incursions of the Elamite king into Assyrian-controlled territory.

Moreover, to interpret military campaigns positively, the Assyrian scribes presented each one as a definitive victory over their enemies. Yet the reconstruction of Ashurbanipal’s campaigns against Elam, for example, showed that this was not always the case, and after five campaigns Assyria still needed two more years to track down the Elamite rebels.

Exceptionally, the royal inscriptions also reported cases when Assyria did not win, but did so only to demonstrate how difficult the battle was. The report on a partial defeat of Sennacherib's troops at Kish gave prominence to Sennacherib's bravery; even after Assyrian magnates had lost this battle, he was able to mobilize his troops and went on to defeat the rebels at Cutha. Thus, the Assyrians lost the battle but won the war (RINAP 3/1 1:21–33). In some cases, the Assyrian scribes also admitted that the bravery of Elam instilled fear among the Assyrians. By allowing Sennacherib to confess his fear of a harsh winter and opt for a retreat instead of continuing the siege of the Elamite capital Madaktu (de Miroschedi 1986), the royal scribes laid stress on the dangers of the campaign and on Sennacherib's wisdom and discernment (RINAP 3/1 35:23'–24').

The difficulties encountered in the campaigns in Elam are also used to highlight the Assyrian kings' bravery. For example, during campaigns against Babylonia in 704–702, Assyria had to face the coalition organized by the Elamite king. The scribes' descriptions give the impression of a massive and well-organized Elamite army with excellent commanders: “To the land of Sumer and Akkad, he (Šutruk-Nahhunte II) sent to his (Marduk-apla-iddina's) assis[tance] Imbappa, [his] field marshal, [together with the massed body of] his [tr]oops, Tannanu, (his) third man, ten unit commanders, including Nergal-našir, a Sutilian who is fearless in battle, 80,000 archers (and) [lancers, (and) the 850] wagons (and) horses that were with them.” (RINAP 3/1 1:8–9). The bravery of ten Elamite commanders sent to fight against Assyria is highly valued “they did not know death”, that is, they did not fear to die (RINAP 3/1 1:17). The positive evaluation of the enemy served to underline the invincibility of the Assyrian army and Sennacherib's fearlessness. Similarly, the description of Elamite troops and the fear of Ashurbanipal in facing Te-umman's army was intended to underline Ashurbanipal's piety: he received confirmation by Ishtar and the inscriptions report his long prayer (*BIWA* B§33).

Belittlement and vilification

Assyrian royal inscriptions not only overemphasized Assyrian victories but also intentionally belittled and vilified their enemies. In the case of Elam, it is possible to observe a gradually worsening presentation of Elamite troops and their kings.

Belittlement of the Elamite army

A neutral description of the Elamite army and warriors changed with Sennacherib's inscriptions. The first level of belittling was achieved by means of irony when Sennacherib's scribes described the Elamite hero Humban-undaš and his magnates: “who ... have reddish gold sling straps fastened to their forearms, like fattened bulls restrained with fetters.” (RINAP

A higher level of belittling was achieved by means of metaphors describing Sennacherib's victory: "I slit their throats like sheep (and thus) cut off their precious lives like thread ... I cut off (their) lips and (thus) destroyed their pride. I cut off their hands like the stems of cucumbers in season." (RINAP 3/1 22 vi 2–13). Even more naturalistic is the metaphoric description of soldiers' fear: "Their hearts throbbed like the pursued young of pigeons, they passed their urine hotly, (and) released their excrement inside their chariots." (RINAP 3/1 22 vi 30–32).

Belittlement of Elamite kings

The first negative comments on the Elamite king Šutruk-Nahhunte II appeared in Sargon II's annals. Sargon's scribes called him "enemy" (*nakru*; l. 382). A more negative evaluation represented Šutruk-Nahhunte II's failure to observe war ethics. When Marduk-apla-idinna sent him a bribe to obtain his support against Assyria, Šutruk-Nahhunte accepted money but out of fear did not come to help the Babylonians. Because of this, he was branded "evil, malevolent" (*ṣēnu*; Ann. l. 308–310).

Another way of belittling Elamite kings was to present them as cowards, who in order to save their own lives abandoned their people and cities and escaped to the mountains. The cowardice of the Elamite kings was a constant feature in Assyrian royal inscriptions. Thus, for example, Šutruk-Nahhunte II avoided confronting Sargon II in a pitched battle and left the Raši region in the hands of the Assyrian troops; Kutur-Nahhunte II, seeing Sennacherib's army, abandoned the capital Madaktu and escaped to save his life; Humban-haltaš III and Humban-habua disappeared like fish in the water (*BIWA* F iii 69) and escaped to the mountains avoiding the battle against Ashurbanipal (*BIWA* F §20–21).

According to Assyrian scribes the Elamite kings were not only cowards but, as Sennacherib's inscription illustrates, they did everything to save their own lives: "(As for) him, Umman-menanu (Humban-menana III), the king of the land Elam, along with the king of Babylon (and) the sheikhs of Chaldea who marched at his side, terror of doing battle with me overwhelmed them like *alû*-demons. They abandoned their tents and, in order to save their lives, they trampled the corpses of their troops as they pushed on." (RINAP 3/1 22 vi 24–29).

The scribes belittled the person of the king and commented on his judgment and behavior. Thus Sennacherib's scribes added spiteful notes on Humban-menana III: "After him, Umman-menanu, who does not have sense or insight, his younger brother, sat on his throne. (RINAP 3/1 22 v 14–16, cf. v 33–4); "That Elamite ,..., accepted the bribe from them without thinking." (RINAP 3/1 22 v 40); "He ,..., was a rash fellow who does not have sense or insight." (RINAP 3/2 230:15–16). Esarhaddon's scribes called Humban-haltaš II an obstinate ruler (RINAP 4 1 v 26), while the scribes of Ashurbanipal considered Urtak an ingrate who did not appreciate

what the Assyrian kings did for him (*BIWA B iv 18–26*; cf. also *BIWA B vii 3–7*), and Tammartu II was labelled a “dangerous rebel” (*BIWA F iii 76*).

The royal propaganda reported Te-umman’s arrogant speeches (*BIWA B v 2*) and his obstinacy: “I will not [sleep until] I have come and din[ed] in the center of Nineveh!” (*SAA III 3112’-13’*). But the scribes did not stop at presenting Te-umman’s arrogance; they indeed represented him as the apex of evil. Te-umman was the image of the *gallû*-demons (*BIWA B iv 74*); he reflected evil (*BIWA B iv 78*). The gods punished his evil deeds by disfiguring his body, and Ishtar confused his mind. Yet despite all the signs and portents, he did not change his mind (*BIWA B§32*).

Letters

Evidently the image of Elam reconstructed from the royal inscriptions is only one side of the coin. Other extant Assyrian documents, in particular letters, help to expose the other side of the coin, that is, what Elam meant for the local governors, merchants, soldiers and so on.

Diplomatic and military background

The Assyrian letters, above all, enable one to reconstruct the background to military conflicts and diplomatic tensions that preceded, accompanied and followed the royal campaigns (Waters 1999). These letters resemble modern intelligence reports (Honggeng 2004). The Assyrian agents reported on the movements of the Elamite kings, their army and magnates. For example, letters from Sargon II’s reign give details of where the Elamite army was at a given time (*SAA XV 111–115*), report on Elamite efforts to mobilize troops and raise provisions for the army (*SAA XV 129–130*) and reveal the fear among Assyrian troops when they heard that the Elamite army was close to their camp: “You [know] that this pass [leading to] Urammu is [ver]y difficult [to march through]; there is absolutely no way the Elamite [troops] will be able to get at you. Don’t be afraid; at the city of Urammu where you are to pitch the camp [there is] a plain which is [very] good for encamping; it is also [very] good for reconnaissance expeditions, there is [much] grass there, and it is a [good] place to rest.” (*SAA I 13:5–19*).

Besides military intelligence, Assyrian letters bear witness to intricate diplomatic relations full of false or true accusations. Bel-ibni reported that he was falsely accused by Elamite emissaries and was afraid to come to the king (*SAA XVII 52*). In a similar way, the Assyrian king Ashurbanipal urged the Elamite elders to realize that their support of Nabu-bel-šumani was the root of Elamite destruction (Waters 2002). Similar reports have been preserved from Phases III and IV.

The royal inscriptions describe both military invasions and periods of peace between the

kingdoms. Letters provide insights into the periods not mentioned in the royal inscriptions, demonstrating there were political tensions and even military clashes. For example, while royal inscriptions suggested that Elam's non-aggression treaty with Assyria ushered in a period of peace in 674–664, the letters point out that the peace was only relative. First, there were members of the Elamite royal family who did not agree with the treaty. They not only tried to incite the Elamite king to participate in another Babylonian rebellion but some also travelled to Babylonia to support the anti-Assyrian currents: "Last year after the palace supervisor and the magnates went down to Chaldea, the brothers of the king of Elam kept pushing and inciting the king (Urtak), their brother: 'Let's muster a camp and cross over to Chaldea and remove Chaldea from Assyria's control'. The king of Elam did not do wrong; he did not listen to them and did not [c]omply, but said, 'I will not disregard the treaty.' He [r]estrained them, (and) up to now he has not [...] but has stayed awake. They have been wa[iting for] their brother (to yield), however." (SAA XVIII 202:9–17). Moreover, the problems of fugitives who found their asylum in Elamite territory continued during the period of interlude (SAA XVIII 7).

These reports combined with queries to the gods (SAA IV 74, 139, 142, 144, 271, 273, 280, 281, 282, 289, 290) and prophecies about Elam (SAA IX 8) show that Elam represented a serious threat for the Assyrian Empire (Cooley 2015).

International relations

Whereas the royal inscriptions and numerous letters focus mainly on military tensions, some letters show other aspects of Elamite-Assyrian relations. People (SAA XVIII 80), princesses (SAA XVIII 102), emissaries (SAA X 185), specialists (SAA X 160), sheiks (SAA XVII 154), and so on moved from one kingdom to the other, and the exchange of gifts, booty and goods between Assyria and Elam was conducted on a large scale (SAA VII 60; X 160; XVII 112). Contracts even mention that Elamites were living in Assyria (SAA VI 287); they served in the Assyrian army (SAA XI 139) and court (SAA VII 149; 152). These examples illustrate that the military conflicts were only one side of the coin.

Abbreviations

- | | |
|------------|---|
| <i>ABC</i> | Grayson, A.K. 1975. <i>Assyrian and Babylonian Chronicles</i> . Locust Valley: Augustin. |
| <i>ABL</i> | Harper, R.F. 1892–1924. <i>Assyrian and Babylonian Letters belonging to the K(ouyunjik) Collection(s) of the British Museum</i> , 14 vol. Chicago: University of Chicago Press. |

- Ann Annals of Assyria.
- BIWA Borger, R. 1996. *Beiträge zum Inschriftenwerk Assurbanipals. Die Prismenklassen A, B, C, K, D, E, F, G, H, J und T sowie andere Inschriften*. Wiesbaden: Harrassowitz.
- PNAE The Prosopography of the Neo-Assyrian Empire, Helsinki.
- RIMA The Royal Inscriptions of Mesopotamia, Assyrian Period, Toronto.
- RINAP The Royal Inscriptions of the Neo-Assyrian Period, Toronto.
- SAA State Archives of Assyria, Helsinki.

Bibliography

- Brinkman, J.A. 1968. *A Political History of post-Kassite Babylonia, 1158–1722 B.C.*, Analecta Orientalia 33. Roma: Pontificium Institutum Biblicum.
- . 1986. The Elamite-Babylonian Frontier in the Neo-Elamite Period, 750–625 B.C. In: De Meyer, L., Vallat, F. and Gasche, H. (eds.) *Fragmenta Historiae Elamicae: Mélanges offerts à M.J. Steve*. Paris: Éditions Recherches sur les Civilisations, 199–207.
- Cooley, J.L. 2015. Celestial Divination in Esarhaddon's Aššur A Inscription. *Journal of the American Oriental Society* 135(1): 131–147.
- de Miroschedi, P. 1986. La localisation de Madaktu et l'organisation politique de l'Elam a l'époque Neo-Elamite. In: De Meyer, L., Vallat, F. and Gasche, H. (eds.) *Fragmenta Historiae Elamicae: Mélanges offerts à M.J. Steve*. Paris: Éditions Recherches sur les Civilisations, 209–225.
- Dubovský, P. 2006a. *Hezekiah and the Assyrian Spies: Reconstruction of the Neo-Assyrian Intelligence Services and its Significance for 2 Kings 18–19*, Biblica et Orientalia 49. Roma: Pontificio Istituto Biblico.
- . 2006b. Tiglath-pileser III's Campaigns in 734–732 B.C.: Historical Background of Isa 7, 2 Kgs 15–16 and 2 Chr 27–28. *Biblica* 87: 153–170.
- . 2013. Dynamics of the Fall: Ashurbanipal's Conquest of Elam. In: de Graef, K. and Tavernier, J. (eds.) *Susa and Elam: Archaeological, Philological, Historical and Geographical Perspectives: Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*. Leiden – Boston: Brill, 451–470.
- Frame, G. 1992. *Babylonia 689–627 B.C.: A Political History*. Istanbul: Nederlands Historisch-Archaeologisch Instituut te Istanbul.
- Fuchs, A. 1994. *Die Inschriften Sargons II. aus Khorsabad*. Göttingen: Cuvillier.
- . 1998. *Die Annalen des Jahres 711 v. Chr. nach Prismenfragmenten aus Ninive und Assur*. State Archives of Assyria Studies 8. Helsinki: The Neo-Assyrian Text Corpus Project.
- Gerardi, P. 1987. Assurbanipal's Elamite Campaigns: A Literary and Political Study. PhD Diss., University of Pennsylvania.
- Grayson, A.K. 1965. Problematic Battles in Mesopotamian History. In: Jacobsen, T. and Güterbock, H. G. (eds.) *Studies in Honor of Benno Landsberger on his Seventy-fifth Birthday, April 21, 1965*. Chicago, ILL: The University of Chicago Press, 337–342.

- Honggeng, G. 2004. The Assyrian Intelligence Activities during the Assyrian Empire. *Journal of Assyrian Academic Studies* 18(2): 59–71.
- Laato, A.J. 1995. Assyrian Propaganda and the Falsification of History in the Royal Inscriptions of Sennacherib. *Vetus Testamentum* 45(2): 198–226.
- Potts, D.T. 1999. *The Archaeology of Elam: Formation and Transformation of an Ancient Iranian State*, Cambridge World Archaeology. Cambridge, New York: Cambridge University Press.
- Waters, M.W. 2000. *A Survey of Neo-Elamite History*. State Archives of Assyria Studies 12. Helsinki: Neo-Assyrian Text Corpus Project.
- . 1999. Te'umman in the Neo-Assyrian Correspondence. *Journal of the American Oriental Society* 119(3): 473–477.
- . 2002. A Letter from Ashurbanipal to the Elders of Elam (BM 132980). *Journal of Cuneiform Studies* 54: 79–86.
- Weidner, E. 1954/55. Hochverrat gegen Nabukadnezar II. *Archiv für Orientforschung* 17: 1–9.

CHAPTER SEVENTEEN

Propaganda and symbolism

Representations of the Elamites at the time of Ashurbanipal¹



Shahrokh Razmjou

Introduction

The period between the years 653 and 609 BC marks the end of an old era and the beginning of a new one in the history of the ancient Middle East. As a result of the events that took place over fewer than 45 years, both the Elamite and Assyrian civilizations were brought into decline. After a disastrous defeat by the Assyrians, Elam managed to survive and rise again from the ashes and continued to endure into the Persian period, while the collapse of the mighty Assyrian empire was definitive.

Although numerous historical events remain ambiguous due to the scanty available documentation, the defeat of Elam, a traditional rival of Mesopotamia, was surprisingly well documented by the Assyrians. The Elamites were depicted in great detail during the reign of the Assyrian king Ashurbanipal (668–c.630 BC), both in iconographical and written sources, and there are very few similar cases where we have such correspondence between iconographical, textual and archaeological evidence. The reason for this was not historiographical; rather the Assyrian king sought to show off by commemorating the defeat of Elam, the traditional rival of Mesopotamia, as his utmost achievement.

The events were carefully illustrated on stone by artists and sculptors employed by the Assyrian court, while the scribes recorded descriptions for those illustrations, both as captions and in clay tablets. Evidently, due to the limited space inside Assyrian palaces, including the Palace of Sennacherib, some of the events were carved over older reliefs by eliminating the original carvings.² Most of the exhibited events appear biased in favour of the Assyrians who commissioned the work according to the king's desire. Clearly, the Elamite defeats and

destructions were not carried out on the devastating scale described by Ashurbanipal, but it dramatically weakened the power of Elam as a political and military power (Vallat 1998: 310–311). Sadly, no evidence for the Elamite version of the story has been found to counterbalance the strong anti-Elamite propaganda. In spite of its biased tone, the Assyrian propaganda machine assigned a special place on their palace walls to Elam, allowing us to obtain a better image of the Elamites in the mid-7th century BC.

Background of the great battle and aftermath

In 653 BC,³ following a series of events, the army of Ashurbanipal confronted Elam in battle. According to his records, Teumman,⁴ king of Elam (664–653 BC), had mustered his army and marched against Assyria with the insolent message: “I shall not give up until I come and make war on him” (Luckenbill 1927: 331–332; Gerardi 1987: 136; Potts 1999: 277).⁵ Thus, with Teumman’s army approaching and after receiving an approving oracle from the Assyrian divinities, Ashurbanipal marched against the Elamites (Luckenbill 1927: 332). The location of their battle at Til-Tuba, on the banks of the river Uлай (probably Karkheh River) shows that, contrary to Ashurbanipal’s claims, the Elamites had confronted the Assyrians in their own territory.⁶ Here, the Elamites experienced a horrific defeat; they were massacred and thrown into the river while Teumman and his son were beheaded. Ashurbanipal installed a refugee Elamite prince, Ummanigash (653?–652 BC),⁷ as the new king of Elam. He also turned against the Assyrian rulers, but was murdered shortly afterwards.

Now Elam apparently became politically unstable, with several rulers ascending the throne in a short period of time. The chaotic situation and the continuous revolts led to further campaigns by Ashurbanipal against Elam and to the destruction of Elamite towns on a massive scale. In particular, Ashurbanipal records that the renowned ancient city of Susa was eliminated from the face of earth (Luckenbill 1927: 310–311).

Representations of the Elamites

It has been suggested that some of the reliefs from the time of Sennacherib (705–681 BC) depict his campaign against Elam and deportation of its people (Reade 1976: 97). There are also figures in the reliefs depicting the siege of Lachish that have been identified as possible ‘Elamite’ archers (Reade 1976: 99). Their garments have vertical folds along the lower part comparable with the Elamite dress seen later in Ashurbanipal’s reliefs. However, these interpretations remain uncertain due to the lack of supporting textual evidence.

The first undisputed Elamite representations are from the time of Ashurbanipal, where their identity is confirmed by numerous epigraphs and corresponding reports in the royal annals.

The Elamites are the main subject of many reliefs of Ashurbanipal, who prioritized his victories against Elam even over his Babylonian conquests.⁸ The huge carved stone slabs decorating the inner walls of the palaces in Nineveh join together to form an entire image representing different scenes and events related to these victories. These highly detailed compositions, mainly representing the battlefield, are full of activity, with minimal unused, empty space, and their main theme is the humiliation of the Elamites, the Elamite royal house in particular, in the most brutal ways. A range of ordinary people, soldiers, nobles, musicians, entourage, women and children are portrayed, but from the hundreds of depicted figures, the main concentration is on the Elamite kings. Apparently, the victory was incomplete without showing their unfortunate fate.

The Elamites are mostly shown in misery and despair or pleading for mercy, as prisoners or deportees, the corpses left in the battlefield or floating in the river. The only “joyful” scene is the introduction of Ummanigash, installed by Ashurbanipal as a puppet king (Russell 1999: 160). Here the Elamites are shown celebrating; clapping hands, playing music and even performing hand-operated ululation [[Figure 17.1](#), top]. Although this looks like a happy scene, it is antithetical to its true context: right under the feet of the joyful Elamite crowd, the corpses of the Elamites and their horses float away down the river.⁹ The juxtaposition of these two contrasting scenes seems deliberate; it appears as a dreadful dark joke, which perhaps looked entertaining to Ashurbanipal (J. Reade pers. comm.).



[Figure 17.1 top: Elamites rejoicing next to a river filled with bodies from the battle of Til-Tuba, Room 33, Southwest Palace, Nineveh; bottom: Elamite envoys Umbadara and Nabu-damiq at the Assyrian court, Room 33, Southwest Palace, Nineveh \(photos by Sh. Razmjou\).](#)

Throughout the reliefs, different scales and canons are used to represent the Elamites. In a number of scenes, the Elamites are depicted shorter than the Assyrians, obese and out of scale. The Elamite envoys Umbadara and Nabu-damiq who stand before Ashurbanipal [\[Figure 17.1, bottom\]](#), are also depicted in the same way.¹⁰ Some of the Elamites' faces, including one of the envoys and a floating body in the river, are wrought with features differing considerably from those of ordinary Elamites. Non-standard physical treatment was also applied to other unfavourable foreign figures such as the Urartian envoys, who are depicted remarkably shorter and slightly hunched with big noses. A similar style is also used for Teumman. He is never shown standing upright in the existing scenes.

Although the reliefs portray a wide range of Elamite figures, they can generally be divided

into four main categories which will be individually treated below: the soldiers and warriors; the people; the nobles and elites; and the kings.

The Elamite soldiers and warriors

Elamite troops are either shown as defenders inside fortifications or as warriors in the battlefield. Ashurbanipal himself describes the Elamite army: "... the chiefs of the bowmen (archers), the 'second' (-men of the chariots), the drivers (*lit.*, holders of the reins), the 'third'-riders(?) (of the chariots), the horsemen, the (light-armed?) bowmen, the captains and (heavy-armed) bowmen of the whole army ..." (Luckenbill 1927: 310–311). In the reliefs they are shown as infantry, cavalry and charioteers, but the warriors generally look alike and it is hard to differentiate them, as almost all have the same dress and weaponry. For example, in the relief showing the siege of Hamanu, the defenders are barefoot and wearing the same outfit and headband as the Elamites in the battlefield.

In the Til-Tuba battle scenes, all Elamites except Teumman are barefoot, wearing only a short-sleeved, often knee-length, belted tunic with V-shaped collar and a simple headband (Potts 1999: 277). They wear no protective gear and are armed only with bows and arrows, and an occasional sword tucked under the belt. This is in clear contrast with the fully equipped Assyrian soldiers, who have body armour, helmets, well-made foot-gear, round or tall shields, bows and arrows, spears, swords, maces and double-side axes. The Elamite carts, pulled mostly by mules, had to confront heavily armoured Assyrian chariots with strong horses and cavalry. The Elamite warriors are shown either on the run, wounded, about to be killed or already killed.

In another relief, a group of Elamite archers are shown moving in a hurry: it is not clear whether they are fleeing or if they are allies helping the Assyrians (Reade 1976: 102). In any case, the most striking image is of a child with a bow and quiver sitting on a cart; an underage fighter being taken to an unknown destination [Figure 17.2, bottom]. It seems that some of the artists or sculptors had a degree of freedom to express some sympathy towards the Elamites.



[Figure 17.2 top: Elamite prisoners marching, Room F, North Palace, Nineveh; bottom: A child with bow and quiver among Elamite troops, North Palace, Nineveh \(photos by Sh. Razmjou\).](#)

The Elamite people

The Ashurbanipal reliefs are also the major source for the depiction of the Elamite people and their towns and settlements, although mostly they are represented in connection with military campaigns and the fall of their cities. They are mostly captives or deportees, often shown marching in rows, carrying their possessions with them.

Despite the ruthless nature of the illustrations, small signs of sympathetic sentiment can again be noted. The relief of the siege of Hamanu is a good example. The Elamite men and women are shown walking in rows, carrying their children and possessions with them under the watch of the Assyrian guards. Some of the higher-class Elamite women are shown with different hairstyles and elegant dresses, walking as if it were not an unpleasant occasion [\[Figure 17.2, top\]](#). Some hold or breastfeed their babies as they walk. Other women, dressed

less elaborately and sometimes wearing veils, may represent ordinary Elamite women. Generally, the Elamite men and women move more normally, in clear contrast with some of the men who are shown out in front, taken forcefully and being beaten and humiliated. Some of them shown in the related scenes have fetters on their feet, with both hands raised as a sign of pleading. Next to the walking people, the sculptor has shown other Elamite men and women hidden in reed marshes. One of the men appears to be whispering, perhaps in fear of being heard by the Assyrians. These reliefs of the captives and refugees seem to be the most natural and sincere presentations of the Elamite people.

The Elamite Nobles and Elite

The Elamite nobles and elite were not spared from humiliation. It can be difficult to distinguish them from the rest of the Elamite people, as they are mostly represented in the same way, but they seem to have slightly longer garments, shorter in front and occasionally with some vertical folds (e.g. the dresses of Ituni and Urtaki in the Til-Tuba reliefs). Apparently, in addition to their bows and arrows, some of the elite were also armed with a sword in the battlefield. Ituni (the *šūt rēši*), one of the officials of Teumman who is depicted twice, once in the main battle scene and once on a separate slab (WA 124941), is shown cutting off his bow as a sign of accepting the defeat (Gerardi 1988: 22; Russell 1999: 160). His dress is similar to the other Elamites, except in the main slab, with two defined rows of vertical folds held up under the belt, comparable with the assumed Elamite figures in Sennacherib reliefs and reminiscent of later Persian folded garments known as Persian court dress (seen, for example, on the statue of Darius from Susa). He is distinguished only by these minor details and a textual reference; otherwise his appearance is much like that of the other men in the battle scene.

Not all nobles seem to be armed with swords. Urtaki, a relative of Teumman, who was injured by two arrows in the battle, is shown begging an Assyrian to cut off his head (Gerardi 1988: 30; Russell 1999: 160). With a quiver at his back but no sword, he was unable to perform the act of cutting the bow or even of committing suicide. Without the accompanying inscription Urtaki would appear to be an ordinary wounded warrior, as he wears the same garment and headdress as the other Elamites.

Even Tammaritu, the eldest son of Teumman, who accompanies his father, wears nothing different from the other soldiers and is armed only with the same bow and quiver. According to Ashurbanipal, during their escape he “tore his garment” (Russell 1999: 159) suggesting that perhaps he wore a different garment to the ordinary Elamite outfit shown on the reliefs in four scenes. This ordinary outfit seems to have been the regular garment worn in daily life and at war. The only difference being the V-shaped, bordered collar. A similar design can be seen on the dresses of three Elamites, probably nobles, who help the Assyrians identify severed

heads from the battle, including the head of Teumman. Their garment also has vertical stripes on the arm and shoulder. Unfortunately, there is no evidence for colour and designs on these outfits.

It is not known whether Elamite nobles and soldiers had actually possessed armour and more advanced war equipment, and their portrayal in a primitive and inferior state was merely the invention of Assyrian propaganda. In the parade scene of introducing Ummanigash, the receiving elites and nobles of Elam are shown kneeling before the newly installed king and his Assyrian escorts. Some of those in the front seem to have slightly longer dresses than the others (like Teumman's envoys), similar to those dresses worn in the battlefield. Here, in addition to their bows and quivers, they have another type of weapon tucked under their belt [Figure 17.3, top]. At first glance these look like axes, but in fact they are short swords. This type of sword had an extension on one side of the locket that enabled it to be held over the belt. More than a century later the Elamite delegation would be shown bringing this type of sword to the Persian king at Persepolis. The Persians used a similar sword, the best example of which is depicted on the Egyptian statue of Darius from Susa.¹¹



[Figure 17.3 top: An Elamite with his Elamite style sword submits to the newly installed king Ummanigash, Room 33, Southwest Palace, Nineveh; bottom: Elamite female musicians, Room 33, Southwest Palace, Nineveh \(photos by Sh. Razmjou\).](#)

The envoys of Teumman, Umbadara and Nabu-damiq, who Ashurbanipal refer to as “nobles” (Russell 1999: 160), also wear long garments, and they have something that looks like a whip under their belt, perhaps a sign of their diplomatic status (Reade 1976: 100) [see [Figure 17.1](#), bottom]. According to Ashurbanipal, when seeing the severed head of their king, “Nabu-damiq stabbed himself with the iron dagger at his belt” and Umbadara “tore at his beard” (Russell 1999: 160), yet in the relief they are shown with neither swords nor beards, which is in contradiction with the epigraph¹²

It is not clear why only a few Elamites are shown with swords in the battle of Til-Tuba, and why they do not use them in battle, even in man-to-man combat, while the Assyrians use theirs. The Elamites carry the swords unused in the battlefield, exactly like those Elamites at Ummanigash’s introduction ceremony. The assumption that most Elamites were either deliberately deprived of their swords in the battle scene or were not using them corresponds with the absence of injured or dead Assyrians in any of the reliefs, and presumably reflects an Assyrian propagandistic method of illustrating one-sided events. The one exceptional case of an Elamite putting a sword to use is that of Ituni, who enacts the cutting of his bow, and thus the presence of a sword was required because of the theme.

Some of the aforementioned Elamite women portrayed on the reliefs clearly have more elaborate garments than others and varying hairstyles, suggesting they might have belonged to the upper class or even noble families. According to Ashurbanipal’s accounts, he had deported many women with him to Assyria, including those from royal and noble families.¹³ It is not clear if the female Elamite musicians with elaborate necklaces and hairstyles shown celebrating the installation of Ummanigash also belonged to the same class or not. [Figure 17.3, bottom].

The Elamite kings

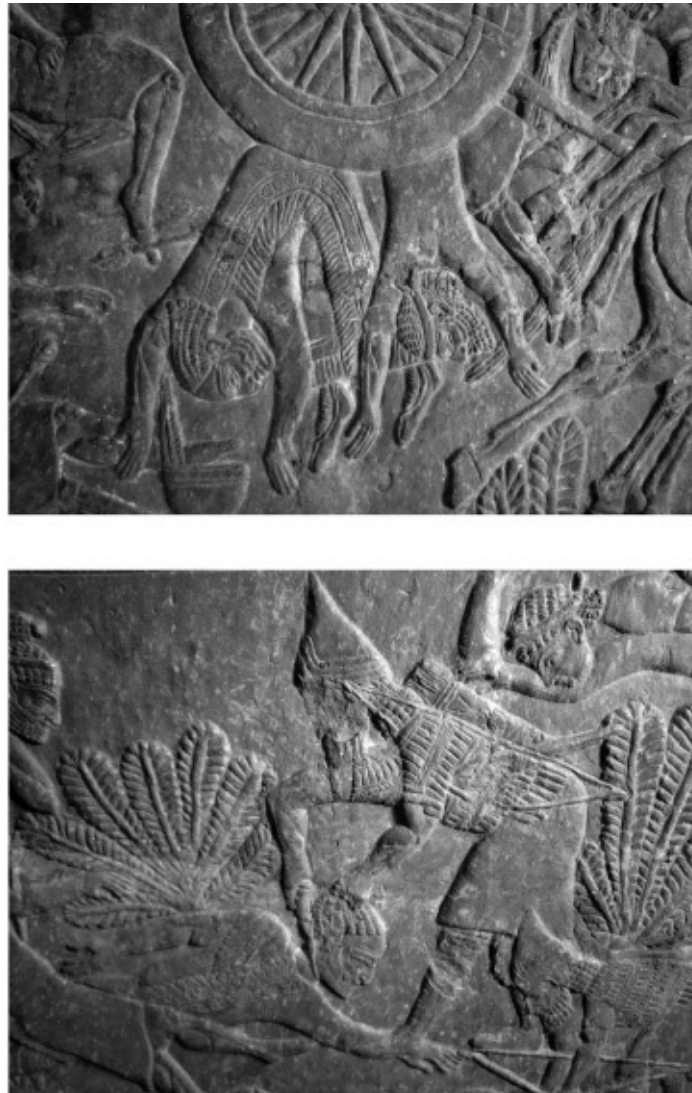
The representations centre on the fate of Elamite kings, particularly of Teumman. All Elamite kings represented in the reliefs are dressed similarly, having the round-shaped royal hat, a long garment and elegant shoes. Since they all look very much alike, except for certain minute details, the identity of those not identified by inscriptions is uncertain in some reliefs.

Teumman

Teumman is depicted in reliefs more often than any other king and can be easily identified as the main character of the story. Despised by Ashurbanipal as “the image of a devil” (Luckenbill 1927: 330), an attempt is made both in texts and reliefs to portray Teumman in a way that befits this image.¹⁴ He is shown at least four times in the remaining reliefs at the

centre of the battle of Til-Tuba, and afterwards his severed head is depicted being carried across the battlefield to the banquet of Ashurbanipal (Bahrani 2004; Bonatz 2004).

The storyline of Teumman in the Til-Tuba battle is not displayed in a sequential order, but the main narrative can be followed through the crowded scenes.¹⁵ Due to the breakage of the reliefs and missing fragments, it is not known whether there were earlier depictions of Teumman, but we enter his story in the midst of battle, where he has fallen under his chariot and is injured by an arrow [Figure 17.4, top].¹⁶ He is then shown fleeing to the woods, aided by his son Tammaritu. In the following scene, he is portrayed kneeling on the ground, encouraging Tammaritu to pick up his bow and fight back (Gerardi 1988: 30; Russell 1999: 159),¹⁷ and finally he is shown fallen below the headless body of Tammaritu, being decapitated by an Assyrian soldier [Figure 17.4, bottom]. After this scene, his severed head is shown several times, including hanging from the necks of captured enemies such as Dunanu, until its final appearance in the banquet scene of Ashurbanipal where it hangs from a tree.



[Figure 17.4 top: Teumman and his son injured under their wrecked chariot, Room 33, Southwest Palace, Nineveh; bottom:](#)

Teumman can be easily distinguished from the other Elamites in the battle scene because of his face, thick eyebrows, and clothing: he wears a round-shaped hat with a hanging feather-like tail and is attired in a long royal garment decorated with tasselled borders and rosettes, which seems to be an official garment of the Neo-Elamite kings (Álvarez-Mon 2009a; 2010: 222, 223, 228, Figs. 28–29, 30–34, 44). His hat falls off his head twice, first during the chariot incident and then during his decapitation. In the latter scene, an Assyrian soldier is shown picking it up from the ground and it is not known where it was taken. The falling of a hat or crown was humiliating for a royal persona (Razmjou 2008: 126); but this happening twice was even worse. The revealing of his balding head or receding hairline was perhaps intended to add to the disgrace.

Teumman's royal garment is reminiscent of the textiles found in the tomb at Arjan (Mo'taqed 1990; Álvarez-Mon 2009a: 4, 5, Figure 1) and seen on the four-winged mythical figure at Pasargadae in the Achaemenid period. All Elamite kings in the reliefs are dressed in the same garments, distinguishing them from ordinary Elamites. These types of garments seem to be also used by the Babylonian royal members.¹⁸ This suggests that the garment Teumman's son tore from his body during the battle before escaping to the woods might also have been similar.

Teumman is never shown as a true king in all his glory and elegance. Rather, he is illustrated on the same scale as the other individuals in the battle scene and is always portrayed in despair, either crushed under his chariot, fleeing with an arrow in his body, hiding helplessly, kneeling, fallen on the ground or being beheaded. The lack of any depiction of him standing upright in the preserved scenes seems deliberate. When his head is carried away to Assyria for use in a sadistic manner as propaganda tool, we can observe its gradual deterioration. Although some of the changes could partly relate to variations in the styles of different sculptors or to an inability to carve an upside-down head, a clear intent to make the head more hideous and deformed can be seen in its stylistic treatment.¹⁹ Clearly the artists had to follow the king's taste for representing Teumman's humiliation and to give a terrifying warning to viewers of their likely fate if they were to oppose the might of Assyria.

Even though both the texts and reliefs portray Teumman in misery and despair, they perhaps unwillingly clarify that despite his injuries he bravely resisted alone with his son, trying to fight back the Assyrians up to the last moment without showing any sign of surrender. Unlike certain other Elamite kings, they are not shown pleading for mercy, despite knowing all hope was lost.

Ummanigash (II)

After Teumman, Ummanigash was installed by Ashurbanipal as the new king of Elam. In his introduction scene, he is led by an Assyrian officer who holds his hand, facing a group of kneeling and rejoicing Elamites. Here Ummanigash is introduced as king, yet he is not depicted as a royal figure. He does not wear the royal Elamite attire but a short-sleeved garment, without tasselled border or rosettes, that reaches his feet [Figure 17.5, top]. He also has the regular Elamite headband instead of the royal hat. In clear contrast to the confident, upright pose of the Assyrians in the scene, Ummanigash bends slightly forward with one hand raised. It is clear that there was no intention to represent him as a powerful king; in fact, he is depicted rather more like a pleading captive. Here the designers may be stressing the point that he was an installed puppet king.

Ummanaldash (III): symbolism in the capture scene

The capture of Ummanaldash²⁰ (646? BC) is depicted on a single wall panel with an accompanying inscription. This relief (British Museum no. WA 124793) was found by Rassam out of its original context, but seems to be part of a missing composition from a series of reliefs in the North Palace of Nineveh (Curtis and Reade 1995: 80, no. 24).²¹ Thus, it is not clear what the other reliefs had represented before and after this scene.



[Figure 17.5 top: Ummanigash introduced as new king to the Elamites by an Assyrian official, Room 33, Southwest Palace, Nineveh; bottom: The capture scene of Ummanaldash, Southwest Palace, Nineveh \(photos by Sh. Razmjou\).](#)

According to Ashurbanipal, Ummanaldash took refuge in the mountains, possibly in the Luristan region, but was handed over to the Assyrians by the mountaineers who did not wish the presence of the fugitive king to provoke an Assyrian campaign against their territory. The scaled pattern of the ground in the scene probably represents the mountainous area. The relief shows Ummanaldash wearing his royal Elamite dress and the round-shaped royal hat, similar to Teumman's. An Assyrian takes him by the wrist, heading downhill towards a prepared chariot, and three other surrendered Elamites, perhaps the king's entourage, walk in front of him with their hands raised in a pleading gesture. [Figure 17.5, bottom] Ummanaldash shows no resistance, but turns around with a raised hand to address the person behind him who had delivered him to the Assyrians.²² His reaction is not mentioned in the accompanying text (for which see Gerardi 1988: 23), nor in other inscriptions, so we cannot know if he was begging for help in despair, complaining, or cursing them for their inhospitable act in surrendering him to the Assyrians. On the right side of the relief, the Assyrian captors are shown lifting Ummanaldash into a chariot by force to be taken to Ashurbanipal.

It is clear that this scene was not part of the original carving on the slab. The original scene

was fully removed and replaced by the capture scene of Ummanaldash as a new design.²³ Apparently, the theme of the capture of an Elamite king was more important than in the previous carvings. Based on the evidence, this relief was not the only slab subject to re-carving. Many others had been chiselled off to be replaced by new scenes of Ashurbanipal's victories over Elam, demonstrating the special importance of this subject.

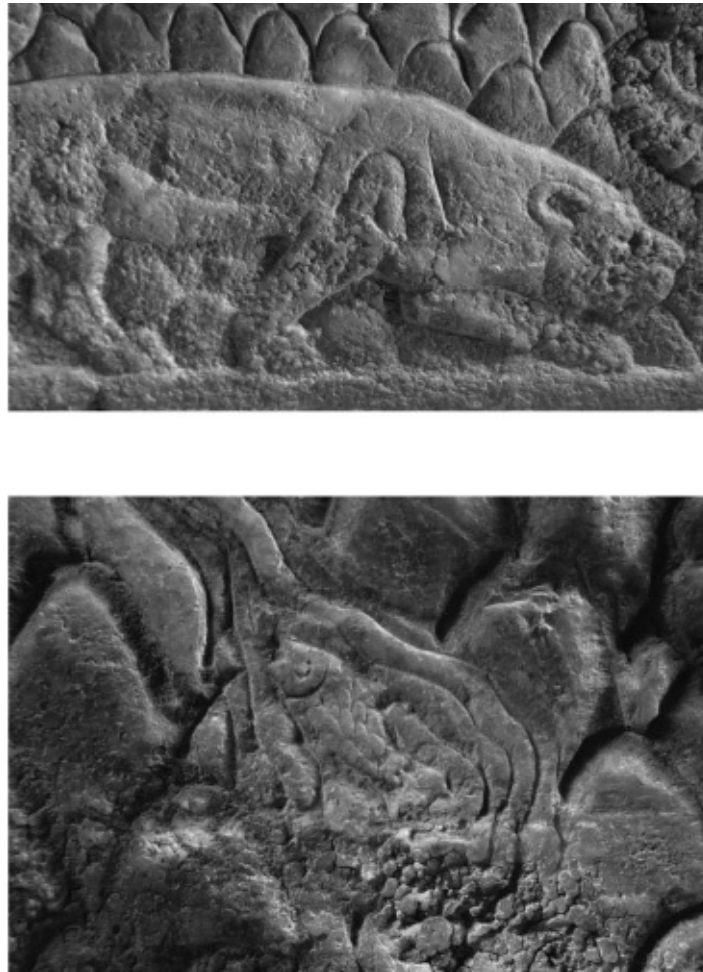
At first glance the rest of the scene seems to display a simple natural landscape with trees and animals, yet certain other elements with significant symbolism are embedded in the scene. The most visible of these is an animal hunting scene in the bottom left corner. It had been previously identified as a lioness slowly moving towards a mountain goat from behind a tree; however, a closer examination by the author showed faint, shallow spots on the body of the predator, which make it a leopard, not a lioness [Figure 17.6, top]. The other animal is probably a wild goat (*Capra aegagrus?*), common in the Zagros Mountains. These animals may seem irrelevant to the main story, but here it will be argued that this is not the case.

Directly above the hunting scene is a very small stream of water shown by a narrow and shallow carving, making it even harder to see. The stream starts in front of the broken figure of the mountaineer who has just handed over Ummanaldash to the Assyrians. The stream moves downwards and stops in the middle area, with two tiny fish inside. Like the hunting scene, the stream does not seem to be merely a simple stream of water with swimming fish, mainly because of its size (between 0.8 and 2 cm wide) and its shallow carving, which make it significantly hidden. Both fish are swimming upwards and face the mountaineer; the same figure that Ummanaldash faces.

At the end of the stream, the water pattern seems to assume a peculiar shape like a hand (?) with fingers, holding a fish. An even closer examination shows that on the water pattern next to the fish is a tiny, delicately carved circle (about 1 mm.) that looks like an eye [Figure 17.6, bottom]. Altogether this composition shows a figure that resembles the head of a snake catching a fish. A similar pattern in the shape of a snake can be seen next to the other fish.²⁴ At this point, even if the hand-like stream had not been a deliberate pattern but was due to damage to the stone, there is no doubt that the tiny circle (eye?) is a deliberate carving that would not be expected on a wavy water pattern.

I agree with Reade who has suggested that "there may be symbolism here" (Curtis and Reade 1995: 80). The leopard and the stream with fish might appear to be simple decorative elements used to fill empty parts of the scene, but they seem instead to serve as metaphors with subtle symbolic messages, as some carvings are too small to have a mere decorative purpose.²⁵ Perhaps they had a magical purpose and did not need to be seen, since the stream and fish (about 1.7 cm.) are so small and even if they were painted would still be hardly visible.²⁶ This stream is different than other streams, which are often shown as a part of the scenery. It is not always easy to interpret metaphors, but there seems to be a certain level of understanding here. The messages conveyed by the elements in this relief are catching a goat,

catching a fish, and catching an Elamite king. In fact, the water, the hand(?), the snake, the leopard and the Assyrians are the hunters, whereas the goat, the fish and Ummanaldash are the hunted subjects. The hunters might have been a metaphor for Ashurbanipal, who was not there himself.²⁷ He occasionally refers to his hand catching the fleeing kings while he was not present. In particular, when referring to the capture of Ummanaldash and other Elamite kings, he uses the phrase: “... my *hand* captured them ...” (Luckenbill 1927: 383).



[Figure 17.6 top: Crouching leopard with spots, Southwest Palace, Nineveh; bottom: Water stream with fish and snake\(?\), depicted on the capture scene of Ummanaldash, Southwest Palace, Nineveh \(photos by Sh. Razmjou\).](#)

Assyrian kings also use fish as a metaphor to refer to their fleeing enemy, or in fact, the hunted subject. This expression is employed a few times by Esarhaddon in his annals. In the campaign against Sidon, he describes how he caught his enemy (king of Sidon) like a fish:

“Abdi-Milkutti, its king, who had fled before my arms into the midst of the sea, I pulled out of the sea, like a fish. I cut off his head” (Luckenbill 1927: 211: 527; also 205, 273).

In fact, a comparison with fish is also made by Ashurbanipal in reference to this particular campaign against Ummanaldash and his rebel successor, and may explain the depiction of the stream and fish in the relief:²⁸

“Ummanaldasi, king of Elam, heard of the entrance of my armies into the midst of Elam, forsook Madaktu, his royal city, fled and went up into the (*lit.*, his) mountain(s). Umbahabua, who, ... had seated himself on the throne of Elam in place of Ummanaldasi, heard, like that one, (of my invasion), forsook Bubilu, the city that was his royal seat, and *like a fish betook (himself) to the depth of the distant waters*” (Luckenbill 1927: 306; Potts 1999: 283; Waters 2000: 75).

The scene with two fishes, one being caught by the snake, might have been a reference to these two kings, one of whom is fleeing and one being caught. This Assyrian expression for fleeing enemies may also explain the water stream in front of Ummanaldash. By inserting a small stream into the scene, the artist was able to illustrate all the relevant elements along with their embedded meanings together.

The hunting snake also demands consideration. The snake was a divine symbol in Neo-Assyrian art and in ritual texts can be identified as the snake god Nirah (Black and Green 1992: 168).²⁹ If not intended here as a depiction of a particular deity, it might have represented a powerful fish-hunter in the water, a metaphor for the enemy-catching king. The snake was apparently the best choice for a fish-hunter in water.

It is not clear why a leopard has been used as a metaphor,³⁰ but it was probably deemed suitable as a fierce and swift hunter. We can also consider that such reliefs were subject to reworking. Perhaps a lion or lioness was originally designed, as the body anatomically resembles a lion, but the artist later removed the mane (if present)³¹ and added spots to convert it into a leopard. The lion was a symbol of Ishtar in Mesopotamia and also represented *šarru*=king (Reade and Finkel 1996: 249), but the lion and lioness were also related to Elam (Root 2003). Apparently lions had been present in the Elamite territory of south-western Iran and in the Persepolis reliefs the Elamites are the only delegation to bring a lioness with two lion cubs, alongside bows and Elamite swords.³² It has been suggested that this might have been an Elamite court tradition for merging Elamite and Persian courts (Root 2003: 20).

It is also known that Ashurbanipal's lion hunting had a strong symbolism. Although he hunts “for pleasure” or “sport” (Gerardi 1988: 26; Russell 1999: 201–202), he also relates the lions to the mountains by calling them a fierce mountain breed (Luckenbill 1927: 392),³³ which may refer to eastern mountains of Elam. It is interesting to note that the other two animal breeds hunted by Ashurbanipal in his hunting reliefs are wild asses and gazelles; precisely the two types of species he mentioned when referring to the wildlife of the plains of Susa (Luckenbill 1927: 311). Ashurbanipal pours wine on the hunted lions in exactly the same way he pours a libation of wine over the head of Teumman at the gates of Nineveh. Thus, an omen delivered to Ashurbanipal comes to fulfilment: “the head of your enemies you shall cut off, you should pour wine over them (Luckenbill 1927: 396; Bonatz 2004: 98).

This connection between Elamite rulers and lions is underlined in a hunting scene of Ashurbanipal, where lion, bows and Elamites are all depicted together. In this scene a lion is

being released from a cage heading towards an Elamite royal family member, who is kneeling in front of Ashurbanipal in a pleading posture, with a pile of bows in front of him [Figure 17.7, top]. Ashurbanipal shoots the approaching lion with a bow, probably the same “fierce bow of Ishtar” that he holds in the ceremony for the hunted lions (Russell 1999: 202).³⁴ The bow seems to be the captured Elamite bow dedicated by Ashurbanipal to Ishtar. This might have been a symbolic act to stress the superiority of the Assyrian power over the famous Elamite weapon. The scene demonstrates the humiliation of the Elamite royal figure, unable to defend himself against the approaching lion, while pleading for Ashurbanipal’s protection. Even in reality, the presence of an unarmed Elamite prince in the lion hunt being exposed to a lion attack was not usual and most probably had symbolic meaning.



[Figure 17.7 top: An Elamite royal member pleading to Ashurbanipal for protection from an approaching lion, Room S \(Panel](#)

Other Elamite kings

We know that Ashurbanipal held four Elamite kings as captives in Nineveh. He refers to Ummanigash,³⁵ Tammaritu, Pa'e, who used the title "king of Elam" at Bīt-imbi, and Ummanaldash, "who exercised sovereignty over Elam after Teuman, -at his (god Nabu) mighty word my hand captured them and I yoked them to my coach, my royal vehicle" (Luckenbill 1927: 383, also 312, 320). One of the Elamite kings is depicted on a relief showing the aftermath of the fall of Babylon and the burning of an Elamite city, probably Susa. He wears the royal Elamite garment and round-shaped hat, and raises both hands. He faces Ashurbanipal, who is shown in a larger scale in his chariot inspecting booty from Babylon and Susa and the marching deportees. The name of the Elamite king is not mentioned, but he has been confidently identified as Tammaritu II, the refugee king of Elam (Reade 1976: 103).

Two other captive kings are depicted in the banquet scene series [Figure 17.7, bottom], but because of the damaged inscription their names are not known. It is also not clear why only two Elamite kings are portrayed here, although other captive king(s) may also have been represented on the missing slabs (Álvarez-Mon 2009b). Both Elamite kings are shown in their royal dress and hat, carrying items to serve Ashurbanipal who rests on a bed in his garden, drinking wine with his queen as the musicians play.³⁶ The royal hats of the captive kings have a similar band with two rows of squares with a neck flap and an extension hanging down the back. Their garments look very much alike, but their facial features differentiate them. The first king has obvious wrinkles and eye bags indicating his more advanced age [Figure 17.8, top]. His wrinkled nose and raised eyebrows may be taken as a pleading expression. The same wrinkled nose is also used for other individuals, mostly desperate figures like Ummanigash and the Uratian envoys. The older figure has a shorter rounded beard, in contrast with the second captive king, who has a rectangular beard and a smooth, unlined face. This second king could be Ummanaldash, who is shown in the capture scene with a rectangular beard.³⁷ The older figure bears some resemblance to the Elamite king, suggested to be Tammaritu in the relief showing the burning of Susa. Without more evidence for the two captive kings, it is difficult to identify them with certainty.

The Hack Marks

Ashurbanipal died in 630 BC, and the Assyrian empire collapsed only 18 years after his death.³⁸ Apparently, his major efforts and concentration on defeating the Elamites also had

disastrous consequences for Assyria. His continuous campaigning against Elam and other neighbouring rebels, such as Arabia, gave other enemies like the Medes an opportunity to reorganize and prepare themselves against Assyria. The allied Median and Babylonian armies captured the Assyrian capital of Nineveh in 612 BC, and the Assyrian palaces fell into the hands of the coalition forces, who enacted revenge against the Assyrian monarchs by hacking away at their images on the reliefs.



[Figure 17.8 top: Detail of the Elamite king with his round-shaped royal hat, North Palace, Nineveh; bottom: Hack marks made over Assyrian soldier to stop him from killing Tammartu, Room 33, Southwest Palace, Nineveh \(photos by Sh. Razmjou\).](#)

The study of these hack marks and the ideology behind them is fascinating, and a series of hack marks on the reliefs related to the Elamite campaigns are particularly informative. A

number of the defacements seem to indicate some level of sympathy for the Elamites. For example, there are clear marks on the face of the installed king Ummanigash [See [Figure 17.5](#)]. The first Elamite in front of him, who holds the foot of the Assyrian officer introducing Ummanigash,³⁹ and the first Elamites kneeling before Ashurbanipal's horse were also defaced (Reade 1992: 88). This suggests that some of the attackers were aware of the identity of these figures and considered their submission to the yoke of Assyria as a betrayal, whereas the faces of the Assyrians in the same scene are not damaged at all. Perhaps certain individuals were able to read cuneiform, but the captions do not contain such details about unnamed figures. The attackers must have been well aware of these events from somewhere else that enabled them to identify certain scenes and characters.

In the Til-Tuba reliefs, the hack marks are focused on the Assyrian troops who attacked Teumman and his son. The spears held against them are clearly damaged, as are the arms and faces of their killers [[Figure 17.8](#), bottom]. The soldier who laid a foot over Teumman's hand to decapitate him had his foot chopped off (Reade 1976: 105). The figure who carried Teumman's severed head has also been defaced and his hand has been hacked. This targeted defacement suggests a respect and sympathy for Teumman and his son, and an intention to end the perpetual violence enacted against them. Although some of the damage has been restored at the British Museum, the traces of hacking are still visible and can be differentiated from non-deliberate or natural damage.

The lion hunting scenes have also been subject to hacking and defacement. In these scenes most of Ashurbanipal's images have been hacked and his eyes in particular were targeted, perhaps with the intention to blind him during the lion hunt. The damage is not limited to his face; it extends also to his hands and his bow and arrow. In one scene his arm and hand are cut off to stop him from piercing a lion with his sword. In another, the tail of a lion is chopped off to release it from Ashurbanipal's grip. In this scene the king's upper body is also destroyed. These non-random hackings show that they had not been performed for fun, but with a mentality behind them. They also confirm some kind of symbolic connection between lions and Elam.

It is difficult to believe that the Median or Babylonian troops would feel such emotion towards the Elamite kings. The Babylonians had their own reasons to hate Assyria, but the targeted hackings in scenes directly related to the Elamites might have been performed by Elamite hands, strongly suggesting their involvement in the alliance.⁴⁰ As the invading armies would not have had the sympathy, information or motivation to perform such an act of revenge for the Elamites, it is even possible that the damages might have been inflicted by those noble or royal Elamite individuals who were residing in Nineveh as captives, awaiting for the right moment to revenge. Considering the time-period, it is certainly possible that some Elamites who had personally remembered or even experienced the Assyrian campaigns and Elam's devastation were present at the fall of Nineveh. Now it was time for the Elamites

with ample motivation to deface Ashurbanipal and to cut off his hands to avenge the crimes he had committed against Elam.

Notes

- [1](#) These reliefs are located in the British Museum, and the present chapter is part of a research project sponsored by the British Institute of Persian Studies and the University of Tehran in 2014. I am grateful for their sponsorship and also to the Trustees of the British Museum for this opportunity.
- [2](#) There are traces of original carvings in some of the reliefs. Some of them have been copied by the author. See also Reade 2000; Razmjou, study in progress.
- [3](#) Julian Reade (pers. comm.) suggests an earlier date (663 BC) for the Til-Tuba campaign.
- [4](#) Teumman is the Assyrian rendering of Tepti-Humban-Inshushinak.
- [5](#) For the reasons and justifications of Ashurbanipal to make war on Elam, see Russell 1999: 164.
- [6](#) This was also mentioned indirectly in Ashurbanipal's inscriptions: "Tammarithu, king of Elam, ... saying: Will they cut off the head of the king of Elam in his (own) land and in the presence of his troops?" (Luckenbill 1927: 303).
- [7](#) Assyrian rendering of Humban-nikash.
- [8](#) Slabs 1–6, Room 33, South West Palace and slabs 5–9, Room 1, North Palace in Nineveh (Bonatz 2004: 93).
- [9](#) According to Ashurbanipal: "I dammed up the River Ulai with the bodies of the warriors and people of Elam. For three days I made that stream flow full of bodies instead of water." (Russell 1999: 159).
- [10](#) Although the envoy's faces seem to be partly reconstructed in the British Museum, the outline of the faces and their bodies still represents a different standard.
- [11](#) On the statue of Darius, it is shown with decorative winged bulls (Stronach 1974: 62, 67, Pl. XXV, Figure 24; Razmjou 2002: 95, Figure 17).
- [12](#) The lack of beard might be related to the contemporary reconstructions of the reliefs, but it is clear that they do not have any swords.
- [13](#) "The daughters, of the kings, the sisters of the kings, together with the older and younger (*lit.* earlier and later) (members) of the families of the Elamite kings, ... the people, male and female, great and small ... I carried off to Assyria." (Luckenbill 1927: 310–311).
- [14](#) Ashurbanipal claims: "At that time an event befell him. His lips became stiff (?), his eye 'turned' and a *gabbasu* grew in it." (Luckenbill 1927: 331).
- [15](#) For the direction of scenes and continuous sequences see Watanabe 2004.
- [16](#) According to Ashurbanipal, he was also injured by the *bubūtu* (frame?/pole?) of his chariot (Russell 1999: 159).
- [17](#) Luckenbill (1927: 393) instead translates the phrase as: "Shoot (me with) the bow".
- [18](#) For example in the so-called grinding scene, Southwest Palace, Room 33, Nineveh. (Russell 1999: Figure 60).
- [19](#) Ashurbanipal himself also inflicted damage on the severed head with his own hand: "With a knife [I cut(?)] the tendons of his face ..." (Russell 1999: 160).
- [20](#) Assyrian rendering of Humban-haltash.

- [21](#) Barnett suggested that the relief was found in Room M of the North Palace, but apparently all re-carved scenes were found in the south or west area of the palace, not in Room M. I am grateful to Julian Reade who brought this to my attention.
- [22](#) Due to the breakage, it is not clear how many individuals were there. Only a pointed shoe is visible that might be a sign of Ellipians (Reade 1976: 98).
- [23](#) This can be understood from traces of the original carving left on the surface by remaining lines and scratches. The original scene is not clear, but as studied by the author, it contained several individuals at the same height of the secondary carving, marching towards the right.
- [24](#) There are two differences: in the upper part there is no carved circle (eye) and the fish has no tail.
- [25](#) In some reliefs, such symbolic elements are more visible, for example, a winged *lamassu* and other mythical figures depicted over a body of water on a relief in the Louvre.
- [26](#) Some shallow graffiti-like carvings in Assyrian reliefs, such as garment margins, might have been more visible by using colours and painting.
- [27](#) Ashurbanipal was not present at many of his campaigns but often took credit for the achievements. For example: “I captured Dunanu, ... alive with my hands. My warriors bound him with iron fetters and sent him quickly to me at Nineveh” (Russell 1999: 161, no. 37).
- [28](#) Umbahabua, the successor of Ummanaldash, was a usurper, called by Ashurbanipal *mihret Ummanaldaš*, from the word *mihirtu*, literally meaning “counterfeit” or “equivalent”. Waters (2000: 77) suggests “in opposition to” as an appropriate translation. Clearly, Ashurbanipal did not recognize him as a king.
- [29](#) Nirah was worshipped in the city of Der on the border between Mesopotamia and Elam. For the Elamites, the snake was also a divine symbol, represented on reliefs and sealings. In this scene, the snake has probably not been used in an Elamite context.
- [30](#) Leopards (singular *ni-im-ru*) were known to the people of Mesopotamia from earlier times, but the meaning in the Neo-Assyrian period is dubious.
- [31](#) I did not observe traces of reworking to remove the mane.
- [32](#) The delegations at Persepolis bring animals related to their region.
- [33](#) Ashurbanipal refers to the lions as “mountain breed”, but says that he hunted them “upon the plain”.
- [34](#) “[Ummana]pp[a, son of U]rtaki, king of Elam, who fled and submitted [to me...] a lion sprang upon him [...] he feared, and he implored my lordship (for aid)” (Luckenbill 1927: 392).
- [35](#) Since Ummanigash II was murdered in Elam, this may refer to another Ummanigash (III?) held at the court of Ashurbanipal.
- [36](#) The epigraph related to this scene says: “[...] the kings of Elam, ... [...] they prepared the royal meal with their own hands and they brought it before me” (Barnett 1976: Pl. LXIV, 57; Gerardi 1987: 209–210; 1988: 25).
- [37](#) Gerardi (1987: 210) suggests that these two kings should be identified as two of the three captured Elamite kings: Tammaritu, Ummanaldash and Pa’e.
- [38](#) The date c. 630 BC is now more accepted for the end of Ashurbanipal’s reign, though some scholars still prefer 627 BC.
- [39](#) His face is partly restored.
- [40](#) Previously suggested by Reade 1976:105. An extensive study by the author was given as a lecture in the National

Bibliography

- Álvarez-Mon, J. 2009a. Notes on the 'Elamite' Garment of Cyrus the Great. *The Antiquaries Journal* 89: 21–33.
- . 2009b. Ashurbanipal's Feast: A View from Elam. *Iranica Antiqua* 44: 131–180.
- . 2010. Elite Garments and Head-Dresses of the Late Neo-Elamite Period (7th–6th Century BC). *Archaeologische Mitteilungen aus Iran und Turan (AMIT)*. Neue Folge 42: 207–235.
- Bahrani, Z. 2004. The King's Head. *Iraq* 66: 115–119.
- Barnett, R.D. 1976. *Sculptures from the North Palace of Ashurbanipal at Nineveh (668–627 B.C.)*. London: British Museum.
- Black, J. and Green, A. 1992. *Gods, Demons and Symbols of Ancient Mesopotamia*. London: British Museum Press.
- Bonatz, D. 2004. Ashurbanipal's Headhunt: An Anthropological Perspective. *Iraq* 66: 93–101.
- Cutis, J. and Reade, J. (eds.) 1995. *Art and Empire: Treasures from Assyria in the British Museum*. New York: The Metropolitan Museum of Art.
- Finkel, I. and Reade, J. 1996. Assyrian Hieroglyphs. *Zeitschrift für Assyriologie* 86: 224–268.
- Gerardi, P. 1987. *Ashurbanipal's Elamite Campaigns: A Literary and Political Study*. PhD Diss., University of Pennsylvania.
- . 1988. Epigraphs and Assyrian Palace Reliefs: the Development of the Epigraphic Text. *Journal of Cuneiform Studies (Journal of Near Eastern Studies)* 40/2: 1–35.
- Luckenbill, D.D. 1927. *Ancient Records of Assyria and Babylonia II*. Chicago: University of Chicago Press.
- Mo'taqed, S. 1990. Pārche-ye Makshufe az Tābut-e Bronzi-e Kitin Hutrān dar Arrajān Behbahān. *Āthar* 17: 64–147.
- Potts, D.T. 1999. *The Archaeology of Elam*. Cambridge: Cambridge University Press.
- Razmjou, Sh. 2002. Assessing the Damage: Notes on the Life and Demise of the Statue of Darius from Susa. *Ars Orientalis* 32: 81–104.
- . 2008. *Ritual Practices at Persepolis*. PhD Diss., University of London.
- . forthcoming. *Elamite Warriors in Median Army: Revenging the Defeat of the River Ulai*.
- Reade, J. 1976. Elam and Elamites in Assyrian Sculpture. *Archaeologische Mitteilungen Aus Iran* 9: 97–106, Pls. 21–28.
- . 1992. The Elamite Tablets from Nineveh. *Nouvelles Assyriologiques Brèves et Utilitaires* 1992–1119.
- . 2000. Restructuring the Assyrian Sculptures. In: Dittman, R., Hrouda, B., Löw, U., Mathiae, P., Mayer-Opificius, R. and Thürwächter, S. (eds.) *Variatio Delectat: Iran und der Westen. Gedenkschrift für Peter Calmeyer*. Münster: Ugarit-Verlag, 607–625.
- Root, M.C. 2003. The Lioness of Elam: Politics and Dynastic Fecundity at Persepolis. In: Henkelman, W. and Kuhrt, A. (eds.) *Achaemenid History XIII: A Persian Perspective. Essays in Memory of Heleen Sancisi-Weerdenburg*. Leiden: Nederlands Instituut voor het Nabije Oosten, 9–32.
- Russell, J.M. 1999. *The Writing on the Wall: The Architectural Context of Late Assyrian Palace Inscriptions*, Mesopotamian Civilizations 9. Winona Lake: Eisenbrauns.
- Stronach, D. 1974. La Statue de Darius le grand découverte a Suse. *Cahiers de la Délégation Archéologique Française en Iran* 4: 61–72.

Vallat, F. 1998. Elam i: The History of Elam. *Encyclopaedia Iranica* VIII, fasc. 3: 301–313.

Watanabe, Ch. E. 2004. The ‘Continuous Style’ in the Narrative Scheme of Assurbanipal’s Reliefs. *Iraq* 66: 103–114.

Waters, M.W. 2000. *A Survey of Neo-Elamite History*, State Archive of Assyria Studies XII. Helsinki: State Archives of Assyria Project.

Part V

Language and writing in Elam



CHAPTER EIGHTEEN

Prehistoric administrative technologies and the ancient Near Eastern redistribution economy

The case of greater Susiana



Denise Schmandt-Besserat

Introduction

Ancient Near Eastern art of the 4th and 3rd millennium BC glorifies the temple redistribution economy. Mesopotamians are depicted proudly delivering vessels filled with goods at the temple gate (Leick 2002: 52–53; Nissen and Heine 2003: 30–31, Figure 20) ([Figure 18.1 A](#)), and Elamites celebrate their huge communal granaries (Amiet 1972b: Pl. 16:660, 662–663; Legrain 1921: Pl. 14: 222) ([Figs. 18.1 B-E](#)). What the monuments do not show is the judicious administration which managed the temple's and community's wealth. Nor do they tell when, how and why the redistribution system was created.

In this chapter we analyze what the prehistoric administrative technologies such as tokens and seals may disclose on the origin and evolution of the exemplary redistribution economy (Schmandt-Besserat 1992a: 172–183; Pollock 1999: 79–80, 92–96) which developed in antiquity in the land that was to become Elam (Vallat 1980: 2; 1993: CIV).

8th millennium BC – initial village period¹ – the first tokens

The earliest human presence in the Susiana and Deh Luran plains – Greater Susiana (Moghaddam 2012a: 516) – was identified in level A of the site of Chogha Bonut, ca. 7200 BC. The evidence suggests the seasonal encampment of a small band who lived from farming as well as hunting (Alizadeh 2003:40). Among the scanty remains they left behind were fire pits dug into living floors and a scattering of artifacts, including flint and obsidian tools, rocks smeared with ochre, clay figurines and tokens (Alizadeh 2003: 35).

A century later, during the Bus Mordeh Period, ca. 7100 BC, the site Ali Kosh was a hamlet of sedentary farmers in the nearby Deh Luran Plain. It is not known where the Ali Kosh settlers came from, but what seems certain is that they arrived with flocks of goats and sheep and with the knowledge of agriculture (Alizadeh et al. 2004: 71). This can be deduced from the fact that the large grain cereals they cultivated in their fields, such as emmer-wheat and two-row hulled barley, were not native to the region (Hole, Flannery and Neely 1969: 343). Twelve small clay spheres recovered in the Bus Mordeh levels are important, because they show that the Deh Luran farmers not only arrived with grains to cultivate but also with tokens to count.

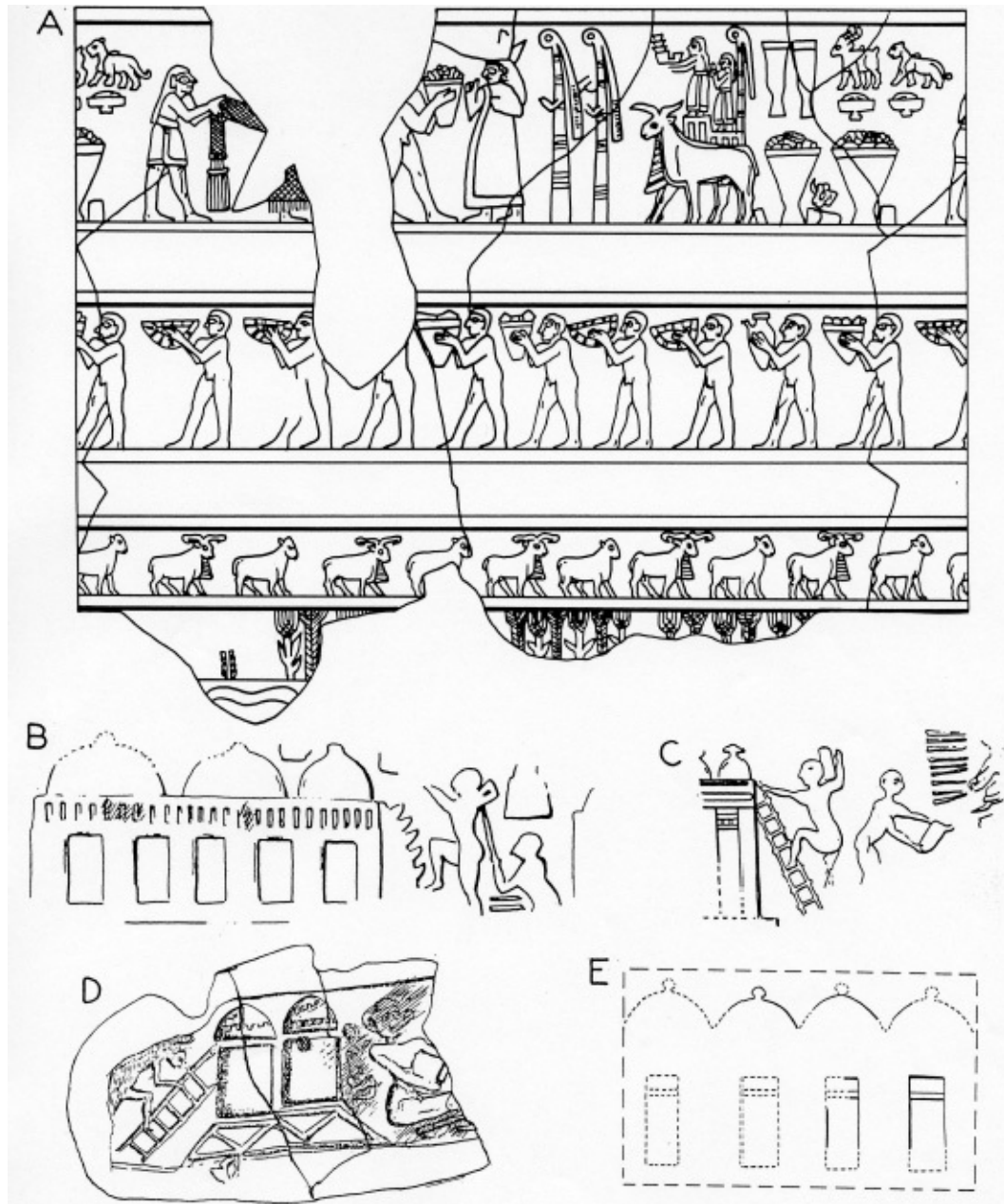


Figure 18.1 A. The ritual delivery of offerings at the gate of Eanna, the temple of Inanna in Uruk, Mesopotamia. Carvings on the Uruk stone vessel (after Denise Schmandt-Besserat 1992a: Figure 107); B and C. Susa: the storage of goods in public warehouses. Sealings (after Amiet 1972b: Pl. 16: 660, 662–663); D. Sealing (after Legrain 1921: Pl. XIV: 222); E. Sealing (after

As modest as they were, the 12 spheres of Ali Kosh provide important insights into the culture and economy of the early farming communities. First, they indicate the ability to count and therefore the cognitive capacity for management and administration. Second, they bring evidence that measures of grain were counted since, as is known from the signs of writing that derived from tokens, the sphere stood for a large measure of grain – perhaps a bushel (Schmandt-Besserat 1992a: 150–151). Archaeology cannot possibly reveal the motivation for counting bushels of grain in the 8th millennium BC. One is left to reason that counting, a demanding cognitive skill, was not acquired to merely calculate what farmers held in their family granary. It must have been for a more compelling reason. The fact that grain was the main staple, and that it could be stored over the lean season, made it the logical commodity to create a redistribution economy. And once such a redistribution economy was initiated, it required management. In the absence of other plausible reasons, we propose that the tokens of Chogha Bonut and Ali Kosh bring evidence that Greater Susiana was engaged in an economy of redistribution – a system of economic organization in which nonperishable food surpluses are collected and managed by an elite for redistribution for the community. The redistribution fulfills important communal functions, for instance, organizing banquets and rituals in honor of the gods (Schmandt-Besserat 2001: 399–400). Chogha Bonut and Ali Kosh thus borrow the token system, used by Mesopotamia and much of the Near East since the 8th millennium BC, to count and thereby control the collection and redistribution of communal goods. At its beginning in the region, of course, the operation would have been simple and modest, involving a number of households and perhaps headed by elders.

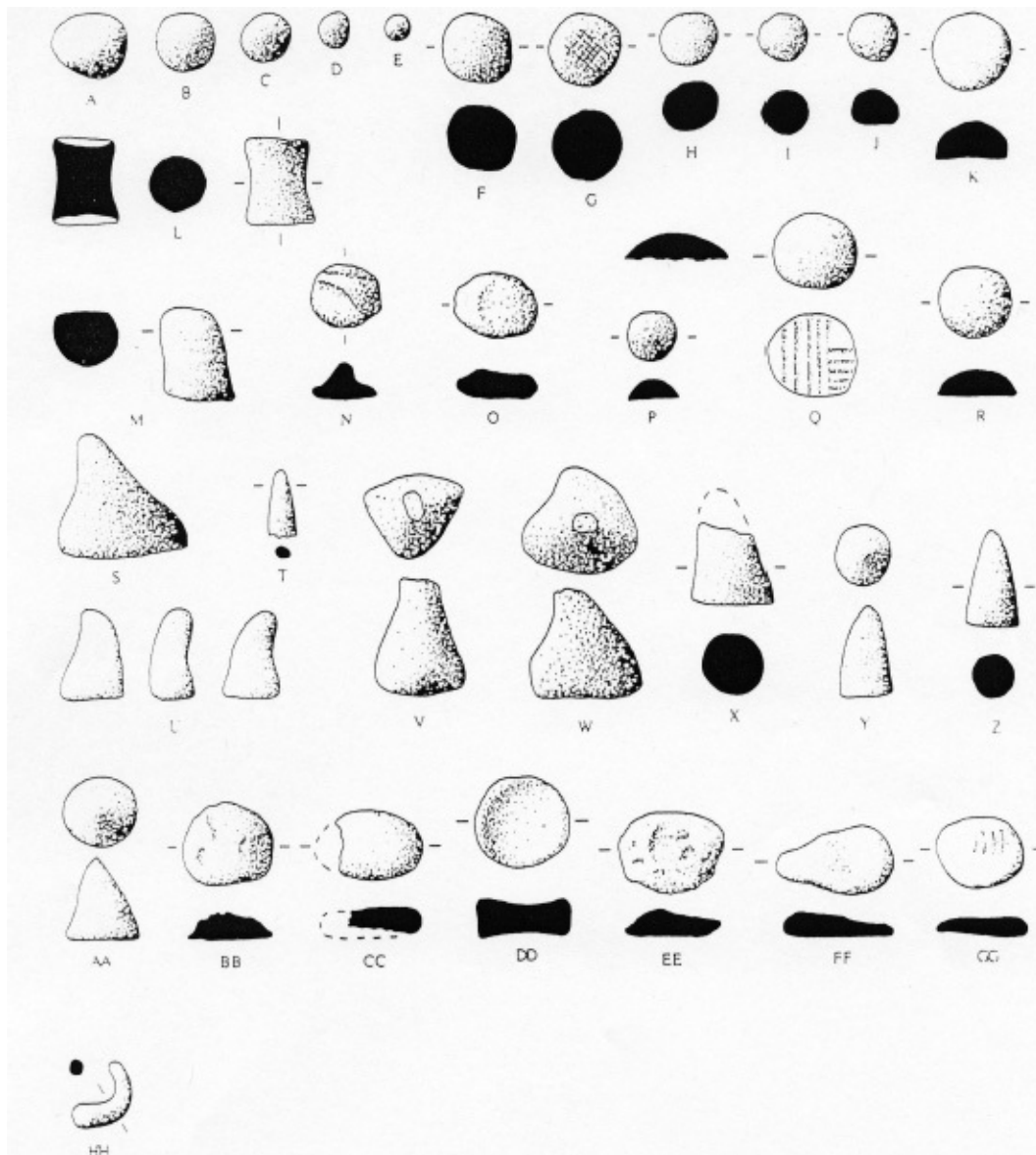
A farming redistribution economy was an extraordinary accomplishment in human cooperation. It was nothing less than the second greatest economic event in the evolution of mankind. The first was when our ancestors, the hunters, broke rank from the other primates by sharing their catches with the band (Wilson 2014: 22–23; Hayden 2014: 36). The cooperation of farmers to accumulate communal goods at the dawn of agriculture continued the millennia-old altruistic tradition of the hunters and gatherers. In both instances, sharing resources increased the chances of survival of the group. It is the farmers' redistribution economy, however, that brought humans on a path leading to administration technologies, the increase of cognitive skills and ultimately writing and civilization.

7th millennium BC – initial village period – neolithic administrative technologies

Farming and the corollary redistribution economy prospered in the entire Near East in the 7th

millennium BC. In Deh Luran ca. 6900–6700 BC, the cultivated fields around the village of Ali Kosh became larger than those of the previous Bus Mordeh period. The houses increased in size to include multiple rooms. Pottery, the Neolithic craft *par excellence*, became part of the assemblage of the Mohammed Jaffar period, ca. 6700–6500 BC. Obsidian trade from Turkey was well attested by 474 implements made of volcanic glass during the Ali Kosh period and 417 during that of Mohammed Jaffar (Hole, Flannery and Neely 1969: 105). Copper (from the Central Plateau?) was among the other traded materials represented in both periods, as well as turquoise (from northeastern Iran?), specular hematite (from Fars?) and sea shells (from the Persian Gulf?) (Hole, Flannery and Neely 1969: 242, 350, 353). Otherwise, the token collections of six spheres over the Ali Kosh period and two during that of Mohammed Jaffar showed no development and remained minimal (Hole, Flannery and Neely 1969: 230).

Similar cultural changes in architecture and crafts took place in Susiana at Chogha Bonut B-E, ca. 6900–6700 BC. The token collection consisted of “plain tokens,” which were shared throughout the prehistoric Near East between the 8th and 4th millennium BC (Alizadeh 2003: 86–87, Figure 36) ([Figure 18.2](#)). These plain tokens were usually limited to four geometric types: cones, spheres, disks and cylinders, each with a few subtypes such as those listed below (Tab. 18.1). They were generally smooth-faced or, as in the case of Chogha Bonut, included rare examples which bore either nail impressions (3.16) or a few lines (3.40).



[Figure 18.2 Administrative Technology at Chogha Bonut. Plain Tokens \(after Alizadeh 2003: Figure 36: A-HH\).](#)

The Chogha Bonut assemblage differed from that of Ali Kosh in two major ways. First, the token collection was larger and more varied. Second, obsidian artifacts were rare (Alizadeh 2003:6). It is particularly interesting that Chogha Bonut and Ali Kosh show a striking lack of correlation between tokens and exchange. Ali Kosh was rich in traded goods but poor in tokens. On the contrary, Chogha Bonut, which showed no evidence of trade, had a substantial and diversified token collection. The same is true in other regions of the Near East. For example, in the Zagros Mountains of Iran, the early Neolithic site of East Chia Sabz received obsidian from Nemrut Dag and claims no tokens (Darabi and Glascock 2013: 3804–3809). But in contrast, Ganj Dareh Tepe, also in the Zagros, yielded no obsidian but produced a large token collection. Finally, Catal Huyuk, in Turkey, which derived its prosperity from the obsidian trade, produced few tokens. The fact that tokens cannot be linked to trade reinforces the notion that counting was used for no other function but the local management of goods.

Furthermore, the addition to the token repertory of cones, discs and cylinders, standing, respectively, for small and very large measures of grain and small domestic cattle, further strengthens our hypothesis that counting originated for the control and management of farm products.

It is important to recognize that, as simple and archaic as they were, the plain tokens created a significant administration technology. The cones, spheres, disks and cylinders represented data. Their shape signified both the type of goods as well as the quantity dealt with. For example, a sphere stood for a large measure, perhaps a bushel of grain; a smaller unit – a pint (?) – was represented by a cone. The number of units of goods was shown by the number of tokens in one-to-one correspondence, three bushels of grain were shown by three spheres. The tokens were able to collect, store, communicate, organize and control data. For example, with the help of tokens, a leader could evaluate the yields of the forthcoming harvest; impose a levy on the estimated surplus and control the actual delivery of the goods. Once the collected grain was stored in the communal granaries and the global quantity calculated, the leader could allocate amounts for 1. Seeds; 2. The preparation of festivals; 3. Ritual offerings to the gods; 4. Subsistence in dire times. The fact that plain tokens were used in the entire Near East, with practically no change during three millennia, certainly attests to their usefulness and significance.

[Table 18.1 Plain token types and subtypes](#)

<i>Type I: Cone</i>	<i>Type II: Sphere</i>	<i>Type III: Disk</i>	<i>Type IV: Cylinder</i>
1.1: Isosceles	2.1: Small	3.1: Flat	4.1: Tapering End
1.2: Equilateral	2.2: Large	3.3: Lenticular	
1.5: Large Equilateral	2.24: Half-Sphere	3.16: Nail Impressions	
1.6: Flat		3.40: Sets of Lines and Strokes	
		3.81: High	

6th–5th millennium BC – early and middle village period – the introduction of stamp seals

In the early 5th millennium BC, Chogha Mish adopted seals in its administration (Alizadeh 2008: 78). The site was then a settlement of 15 ha (Delougaz and Kantor 1996a: 280, 284), which loomed large in Susiana over the neighboring villages of Jaffarabad, Jowi and Bendebal. It was also the time when the first indication of industry appeared at Jaffarabad, in the form of pottery workshops (Dollfus 1971: 26–27).

The earliest seal assemblage of Chogha Mish consisted of three stamp seals and two sealings – the impression of seals on clay (Delougaz and Kantor 1996a: 256). The three stamp seals were small, measuring 1.5 to 2.1 cm. They were carved into round or square shapes in colorful orange, red and white stones. The three seals shared the same geometric design consisting of striated quadrants (Delougaz and Kantor 1996b: Pl. 234: GG, JJ, II). Interestingly, the design was not new, but was already popular in Mesopotamia (Amiet 1980: 256, Pl. 8:155). As for the two sealings, they bore the impression of a single seal featuring a rosette motif (Delougaz and Kantor 1996b: Pl. 67A-B). It is not known to what type of vessel or door they had been applied.

Like in Mesopotamia, where stamp seals were already used before the 7th millennium BC, the Susiana seals functioned in tandem with tokens to control the movement of goods within an administration (Alizadeh 2005: 17). The latter indicated the quality and quantity of goods dealt with; the former identified the authority or office in charge. The seals were applied onto jars, baskets and cases, to record the entry/exit of the merchandise they held into/from the collective storehouse. When placed onto a door, the sealing validated the delivery/retrieval of merchandise from a communal storehouse. One may expect that the number of tokens corresponding to the goods delivered or retrieved, were added or removed from the appropriate containers. The added control apparently did not cause any change in the usage of the plain token since the spheres continued to be the most popular counter of Chogha Mish, followed by cones and half-spheres (Delougaz and Kantor 1996a: 253–254; Alizadeh 2008: 77). Two spheres were the lot of Bendebal in level 12 and 16 (Dollfus 1983: 156), and a single cone at Djowi in Period II (Dollfus 1983: 42, 120, Figure 45:12).

It is likely that, at first, the seals served as status symbols and belonged exclusively to the leader(s). But with population increase, and the loss of face-to-face contacts between leaders and residents, the seals came to be used by subordinates on behalf of the leader(s). The addition of seals to the Chogha Mish administration may therefore signal the emergence of a more structured office capable of managing the increasing volume of the redistribution economy.

5th–4th millennium BC (4200–3900 BC) – late village period – Susa I – Acropole Levels 27–24 – the introduction of a temple economy

One millennium later, when Chogha Mish was eclipsed following a conflagration (Kantor 1976: 27–29; Hole 1990: 6–7), it was Susa's turn to take the lead in Susiana, when Jaffarabad (Dollfus 1975: 62), Jowi (Dollfus 1978: 156; 1983: 121) and Bendebal had become centers (Dollfus 1978: 153). Susa I was a settlement of some 15 ha, where industry was taking root

with pottery workshops (Mecquenem 1943: 5). Most importantly, it boasted a temple built atop a monumental terrace (Canal 1978a: 32–38; Steve, Vallat and Gasche 2003: 398; Hole 2008: 167; Álvarez-Mon 2012: 742) where, no doubt, the leaders of the redistribution economy officiated.

The temple, and the terrace decorated with clay cones it stood upon (Canal 1978b: 173), demonstrated a quantum jump in the amount of resources collected from the community. It brings the evidence that, after 2,000 years, the redistribution system had reached a new level of magnitude. The Susa I temple had enough wealth to afford large expenditures for building and decorating monumental structures as well as supporting a large work force of architects, masons, carpenters and ceramicists (Wright and Johnson 1985: 25).

The Susa I temple also signified a change of social structure. The authority in charge of the administration was perhaps the figure depicted in glyptics sporting an imposing mitre and wearing a long embroidered kilt (Harper, Aruz and Tallon 1992: 43–44; Hole 2010: 233) ([Figure 18.3](#)). The personage, shown making awesome gestures between two submissive acolytes, may prefigure the powerful priest-king of the following Uruk and Susa II administration (Amiet 1986: 38). If the redistribution economy ever had been in lay hands, it clearly had shifted to the religious sphere.

One would expect that the transformation of the redistribution economy would lead to major administrative changes, but the people of Susa I still reckoned measures of cereals with exactly the same plain tokens, in the same shapes and sizes as in previous millennia. The cones recovered around the “Massif Funéraire” (Mecquenem 1943: 5, 8 and Figure 3: 15–16) continued to be modeled in clay and to be plain faced. Only the first appearance of a tetrahedron (Mecquenem 1943: 45–46 and Figure 40:2) considered to stand for a unit of labor (Schmandt-Besserat 1992a: 148, 150) offers faint but remarkable evidence of the workforce employed to build the monumental terraces. Also, the introduction of bitumen to manufacture tokens in level 2 of Jaffarabad, 1 cone and 2 spheres in bitumen (Dollfus 1971: 68 and Figure 27:4) against 1 cone, 7 spheres, 5 disks in clay (Dollfus 1971: 55), may be mentioned, although it would have no impact on management. Finally, Jaffarabad innovated painted markings on cone tokens (Dollfus 1971: 68 and Figs. 22, 15, 16).



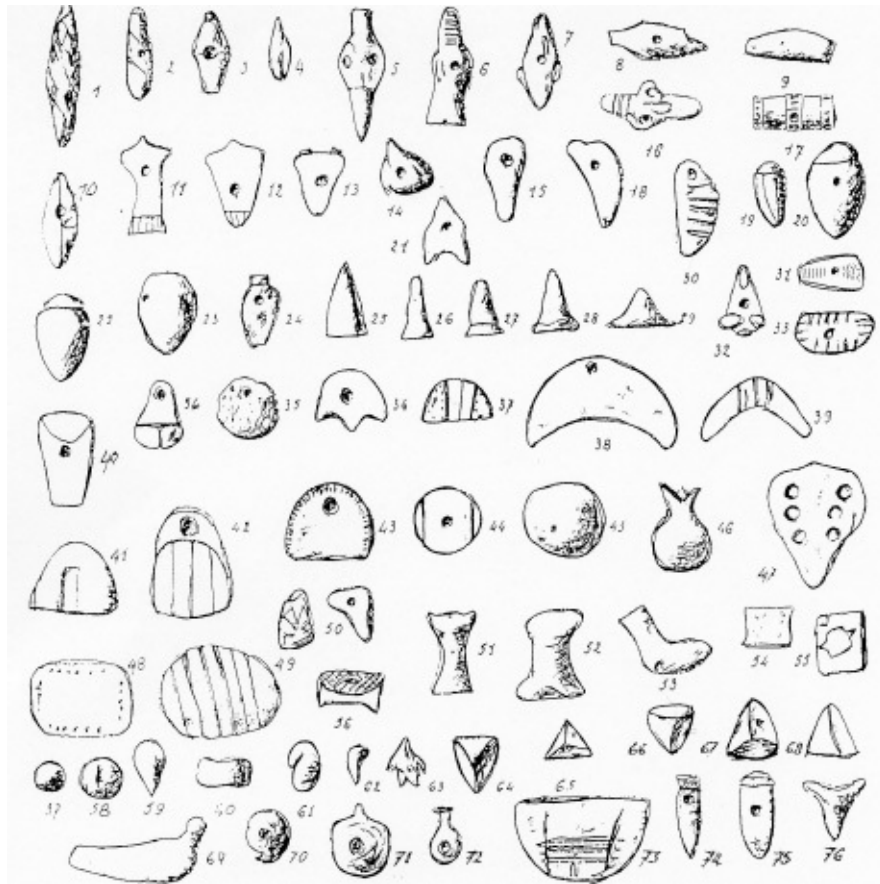
[Figure 18.3 Personage belonging to the period of the Susa I temple \(after Amiet 1980: p. 33: 11b\).](#)

Some may question whether the resources of the Susa I temple could be managed with tokens. The precolonial African kingdoms provide proof that sophisticated tax and conscription systems could be implemented with pebbles and shells (Herskovits 1938: 113–134). It remains to be acknowledged that the plain token assemblages from Greater Susiana were unusually small compared to those from Mesopotamia. For example, Arpachiyah produced 93 tokens of 11 types and 33 subtypes (Schmandt-Besserat 1992b: 155–162), and Tepe Gawra had 485 tokens in 11 types and 30 subtypes (Schmandt-Besserat 1992b: 240–255). In comparison, the complete collection of Jaffarabad, over its entire occupation, which represents the largest collection of Susiana, and Chagha Sefid which represents the largest collection of Deh Luran (6000–5700 BC) (Hole 1977: 233, 237), only yield a total of 70 and 34 tokens, respectively. Eight types and 15 subtypes were represented in Jaffarabad, and three types and eight subtypes at Chagha Sefid (Schmandt-Besserat 1992b: 23–27; 9–11). Moreover, how is one to explain that the Greater Susiana assemblages are poor compared to Iranian sites such as Zagheh, in the Qazvin plain of northern Iran, which contributed 238 tokens in seven types and 15 subtypes (Moghimini and Fazeli 2015: 37 and Tab. 2; Moghimini 2015: 136). Tall-e Geser (Alizadeh 2014: 45, Figure 88), in the neighboring Ram Hormuz area, is similarly no match for the even far earlier Neolithic site of Ganj Dareh Tepe, in the Zagros, with its 511 tokens, in seven types and 36 subtypes (Overmann n.d.). It is well possible that the reason for the discrepancy has nothing to do with the culture or economy of Susiana but simply with the excavations. Tokens are difficult to find because they are minuscule and because their color blends with the fill. They are harder to detect in clay soils than in sandy terrains, and perhaps especially difficult to find in the fertile compact earth of Khuzistan. The systematic use of sieves, which is not always possible, always enhances the chance of recovering the small

artifacts. Finally, vigilance may play the most significant role. Vivian Broman, who was taking part in the Jarmo excavations when writing her thesis on clay artifacts, is to be thanked for the 2002 tokens recovered at the site – the largest collection ever assembled (Schmandt-Besserat 1992b: 176–179).

4th millennium BC (3900–3500 BC) – post village period – Susa II – Acropole I, Levels 23–19 / early and Middle Uruk – The complex tokens and Urban economy

After 2,000 years of unchanging plain tokens, the Susa II “complex tokens” came in many shapes and were covered with markings (Schmandt-Besserat 1992a: 73–88) ([Figure 18.4](#)). This brought the Susa collection of 783 tokens to multiply into 16 types and 178 subtypes (Schmandt-Besserat 1992b: 52–91) and the 813 tokens of Chogha Mish into 10 types and 45 subtypes (Delougaz and Kantor 1996a: 120–125, 1996b: Pl. 134). Complex tokens came in a diversity of new geometric as well as naturalistic shapes such as miniature vessels, tools and furniture. Markings in the form of sets of dots or parallel, perpendicular or criss-cross lines were another distinctive feature of the Susa II complex tokens. Finally, there were markings consisting of painting or appliqué pellets and coils. Perforation of some of the artifacts was yet another characteristic of the complex token assemblages. It is important to emphasize, however, that the plain tokens continued unchanged. The spheres, cones, disks and cylinders continued to be used smooth faced, as they had been all along, starting in Ali Kosh, and continuing through Chogha Bonut, Chogha Mish and Susa I.



[Figure 18.4 Administrative Technology at Susa. Complex tokens \(after de Mecquenem 1943: Figure 23\).](#)

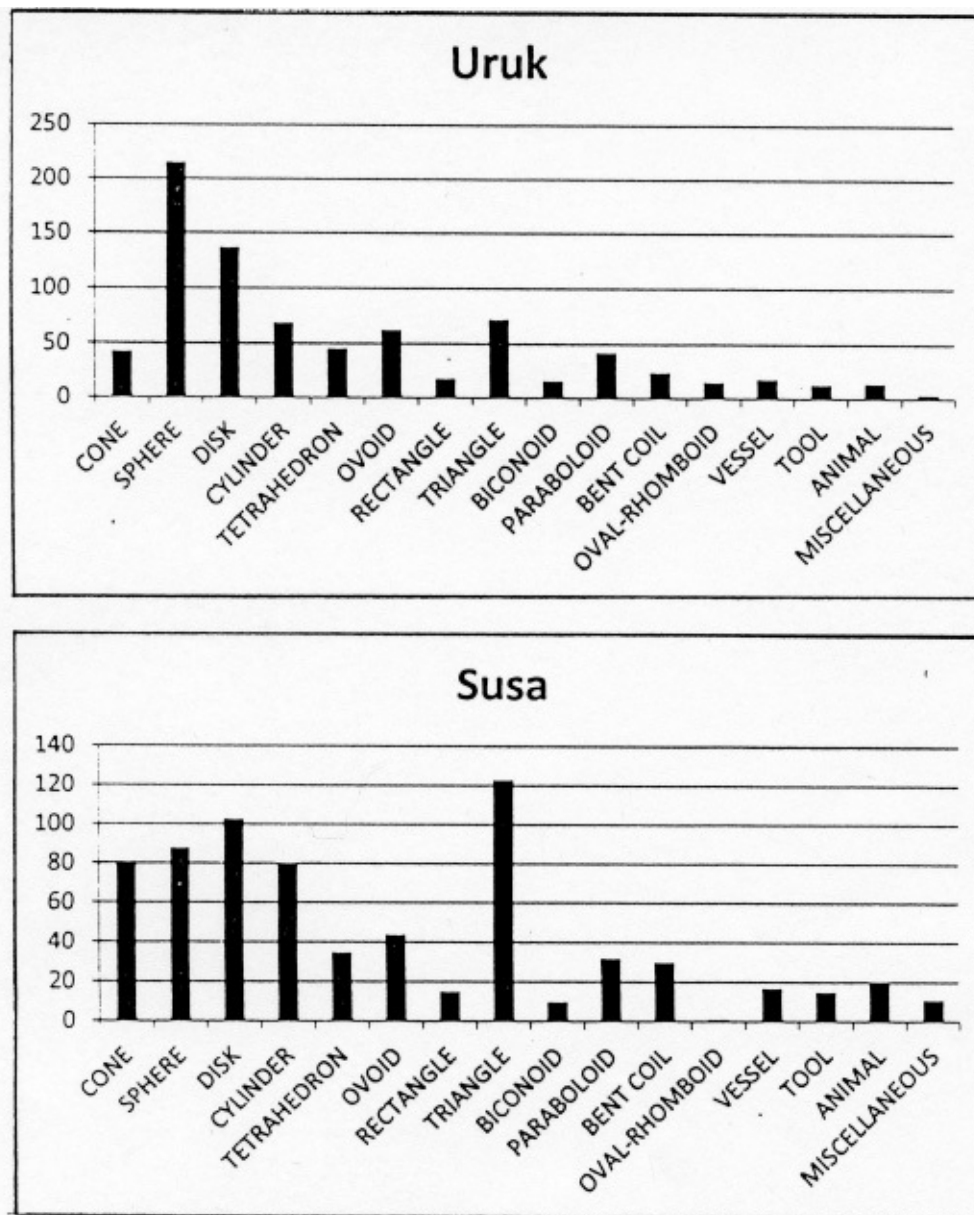
The complex tokens signaled major changes in the scope of the Susa II administration. First, they denoted a greater precision in accountancy. Whereas plain cylinders stood for one generic head of small cattle, the complex tokens used special markings to differentiate between rams, ewes and kids. There were also new tokens to refer to various cereals. Second, the complex tokens signified a vast increase in the range of products administered. Next to the plain tokens which stood for farm products, the complex tokens represented raw materials and manufactured goods (Schmandt-Besserat 1992a: 143–149). There were tokens standing for wool, wood and metal. Others indicated finished products typical of urban workshops, such as various qualities of textiles and garments. The list of processed foods and drinks included beer, oil, bread, cakes and trussed ducks. There were also tokens to count types of vessels, tools and furniture, and finally, luxury goods such as perfume and jewelry. In other words, the administration of Susa II levied urban workshops and guilds.

It is important to realize that most Iranian sites of the 4th millennium BC never acquired complex tokens and continued to be limited to plain tokens. Such was the case for Farukhabad (Wright 1981: 156), Sharafabad (Wright, Miller and Redding 1980: 277), Tall-e Abu Chizan (KS 1663; Moghaddam 2012b: 131, Figure 5.28: 8–14, 29, 36), Tepe Mehr Ali (Sardari Zarchi and Rezaiee 2007: 19), in the southwest; Tepe Sialk (Ghirshman 1938), Qoli Darvish (Sarлак 2011) and Sofalin (Hessari 2011) in the Central Iranian Plateau; Tall-e Bakun in the south (Alizadeh

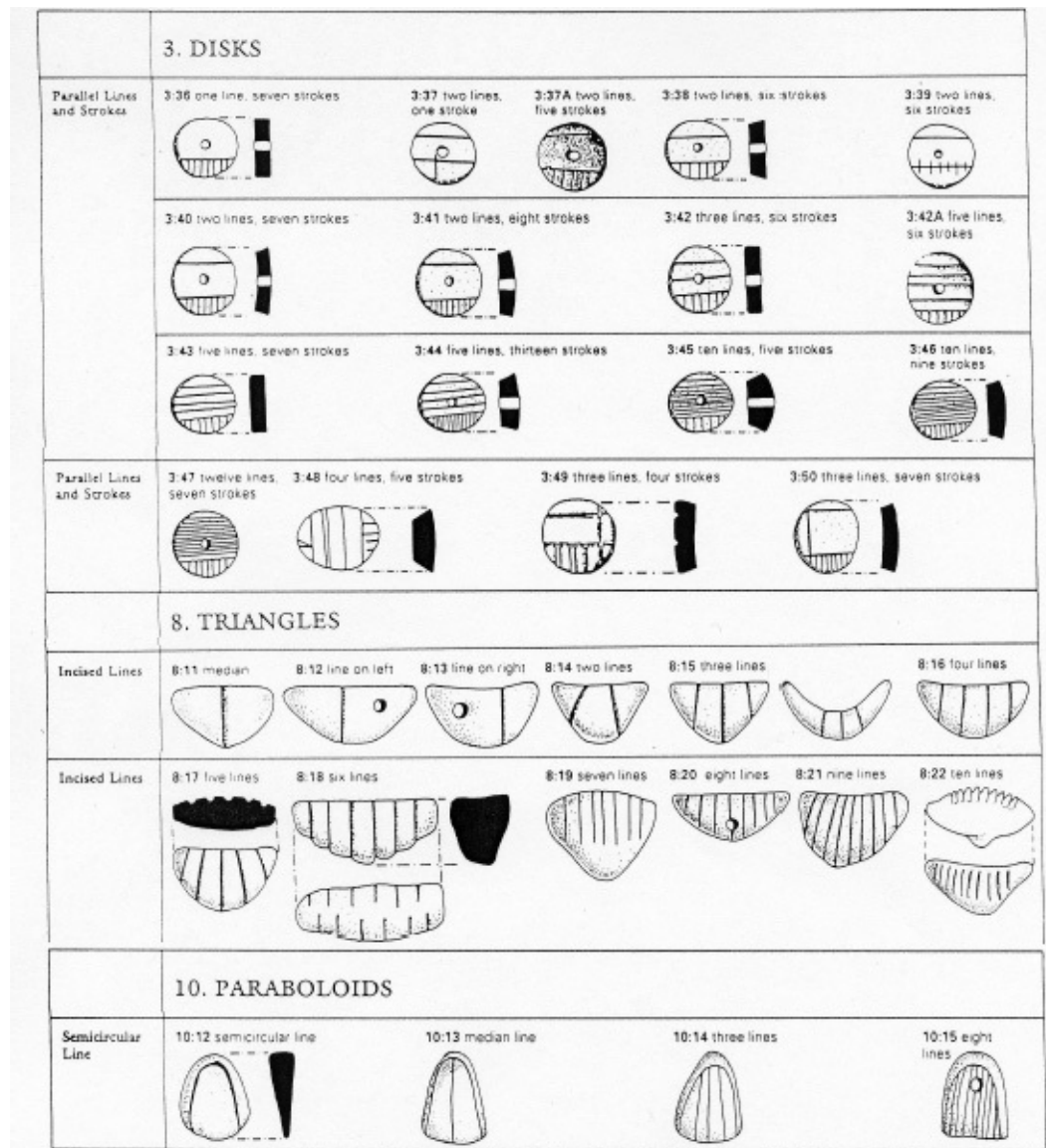
2005: 83–84, 252–255, Figs. 71–72) and Tepe Yahya (Mutin 2013: 150) in southeast Iran. Only five Iranian sites yielded complex tokens: Susa, Chogha Mish, Moussian (Schmandt-Besserat 1992b: 40–42), KS 54 (Johnson 1973: 92; 1976: 171–172; Schmandt-Besserat 1992b: 35–36) and Tepe Hissar II (Dyson 1987: 655–657; Thornton, Gursan-Salzmänn and Dyson 2013: 141). With the exception of Hissar, all these sites were located in Greater Susiana. The complex token phenomenon in Iran may therefore be viewed as a mostly regional development of Greater Susiana.

Except for a group from the adjacent tell of the Ville Royale (Schmandt-Besserat 1992a: 84), the entire Susa token collection originated from the temple precinct on the Acropole mound – the administrative hub of the city (Steve and Gasche 1971: 41; Canal 1978a: 50; Álvarez-Mon 2013: 218). Office buildings decorated with clay cone mosaics were located towards the east (Dyson 1966: 269). The main concentration of tokens was recovered south of the shrine, where workshops and warehouses were located (Morgan et al. 1905: 40 Figs. 48 and 53; Belaiew 1933: 192–193, 196, Figure 28; Mecquenem 1943: 27, 29, Figure 23: 1–76). They were found together with administrative materials such as beveled rim bowls, serving as measures (Nissen 1988: 83–85), and sealings produced by the new type of cylinder seals (Amiet 1985: 37). These types of artifact and architecture decorations were typical of the administrative paraphernalia of Eanna, the temple precinct of the Mesopotamian goddess Inanna in the metropolis of the Uruk city state (Harper, Aruz and Tallon 1992: 50).

The token collection from Susa was remarkably similar to that from Uruk ([Figure 18.5](#)). In particular, the two collections shared series of identical disks, triangles and paraboloids which indicated by a number of lines different qualities of a same product ([Figure 18.6](#)). For example, discs with 1, 3, 4, 5, 6, 8 and 10 lines stood for various types of cloth: and paraboloids with 0, 1, 3 or 8 lines denoted different models of kilts. Triangles with 5 lines, which represented an ingot of metal, were at both sites the most popular tokens of a series of triangles featuring 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 lines. The discrepancy between the Susa and Uruk token collections was chronological. At Uruk, complex tokens appeared in the Ubaid Period, ca. 4400 BC. They reached a floruit during Uruk VI to IV, ca. 3500–3300 BC. However, complex tokens did not occur at Susa before 3500–3300 BC. Accordingly, there can be no doubt that the leader in administrative technologies was Uruk (Carter and Stolper 1984: 113). There is presently no consensus on whether the transmission of complex tokens from Uruk to Susa occurred progressively or suddenly (Potts 1999: 52–59; Petrie 2013: 15). The fact that the levels of Susa I and II followed without transition and the traces of fire on the Acropole and Apadana mounds, however, seem to tilt the scale towards a brief episode (Amiet 1966: 66; Le Brun 1978b: 190; Steve and Gasche 1990: 20, 26).



[Figure 18.5 Token collections of Uruk and Susa, courtesy Karenleigh A. Overmann.](#)



[Figure 18.6 Tokens series \(after Schmandt-Besserat 1992a: p. 209–210, 220–221, 223\).](#)

Complex tokens were recovered at Uruk (Schmandt-Besserat 1992a: 49–73) and Girsu (Schmandt-Besserat 1992b: 228–237) in Mesopotamia and as far west as Habuba Kabira (Schmandt-Besserat 1992a: 88–91) and Tell Kannas (Schmandt-Besserat 1992b: 373–377) in Syria. Although separated by several hundred miles from the Syrian sites, Susa and Chogha Mish shared with them the same ceramic vessels, cylinder seals, sealings and public architecture decorated with cone mosaics introduced from Uruk. In other words, the common denominator of the sites yielding complex tokens was an Uruk intervention (Nissen 1985: 39–40). The accounting techniques with complex tokens imported by the Uruk mega metropolis caused a quantum jump in the complexity of administration of Greater Susiana. The indigenous Susa I redistribution economy, managed with plain tokens, was based on an agricultural society. That of Uruk and Susa II vastly expanded to draw upon both agrarian and urban populations.

4th millennium BC (3500–3300 BC) – post village period – Susa II – Acropole I, levels 18–17/late Uruk – envelopes and the invention of writing

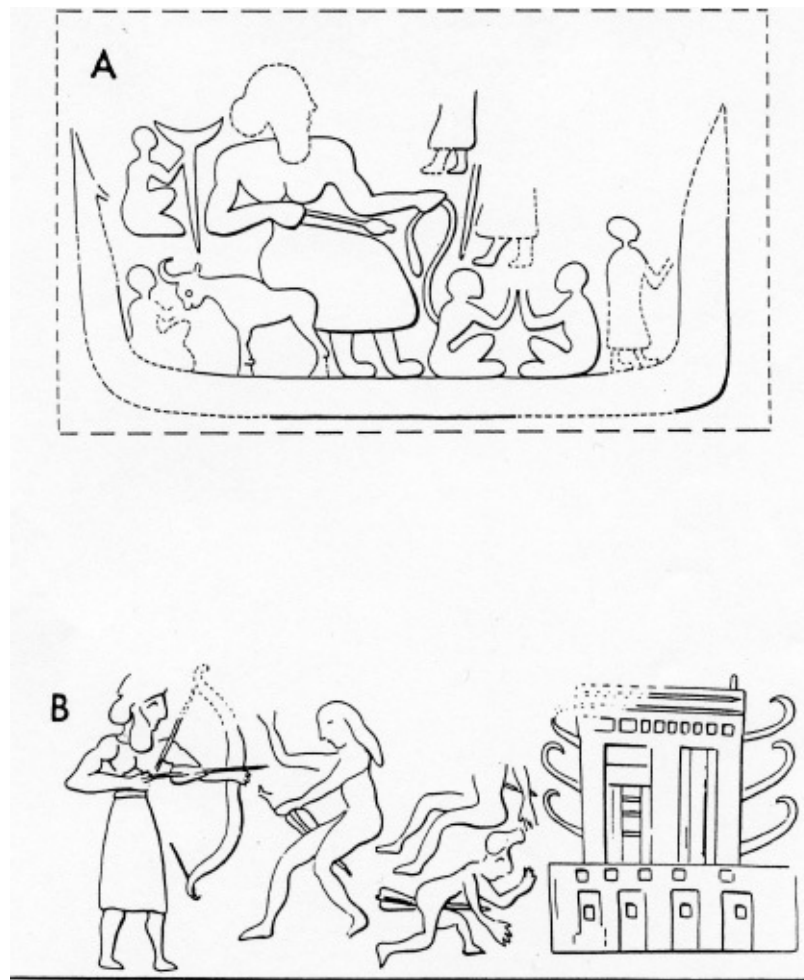
Envelopes to hold tokens were one of the most consequential inventions of the 4th millennium BC, since they led to the invention of writing. The envelopes consisted of hollow spherical or ovoid clay balls about 5–7 cm in diameter (Schmandt-Besserat 1992a: 110–128). The artifacts had thick walls, leaving a small cavity of 2–4 cm where tokens, representing records of contracts or debts, could be kept in archives. The number of tokens enclosed inside envelopes varied from two to 15. There was a majority of plain tokens, but all the tokens held in envelopes were of identical types and subtypes to those found loose.

Seven Iranian sites produced envelopes: Susa (Le Brun and Vallat 1978: 13–18, Figure 45, Pl. I-III; Le Brun 1978a: 62), Chogha Mish (Delougaz and Kantor 1996a: 120–121; 1996b: Pl. 133), Farukhabad (Wright 1981: 156), Sofalin (Hessari and Yusefi Zoshk 2009: 21, Figure 13; Hessari 2011: 42, Figure 14), Qoli Darvish (Sarлак 2011: 204, Figure 28; Alizadeh, Aghili and Sarлак 2013: 161, Figure 14:11), Tepe Yahya (Schmandt-Besserat 1992b: 125–126, Figure 75) and Shahdad (Hakemi 1972: 20, 54, Pl. 22A). The three first sites are in Susiana, Sofalin and Qoli Darvish in the Central Iranian Plateau, and the two other sites are from the south-east. Susa produced 40 complete envelopes, 15 fragmentary and 57 fragments; Chogha Mish 25, plus four fragmentary and Farukhabad a single one (Schmandt-Besserat 1992a: 112–114). The Farukhabad and Chogha Mish examples are dated from the Middle Uruk period, ca. 3700–3500 BC (Schmandt-Besserat 1992a: 114). At Susa, envelopes are securely dated to level 18 and 17 of Acropole, equated to Eanna VI-V, ca. 3500–3300 BC (Vallat 1978: 193; Le Brun 1985: 35).

Helene Kantor noted that envelopes usually occurred in clusters (Delougaz and Kantor 1996a: 120). This must have been the case for the first envelopes discovered on the Susa Acropole, either by Jacques de Morgan in 1901 or Roland de Mecquenem in 1907 (Legrain 1921: 7–8, Pl. XIX:298; Mecquenem 1924: 106–107; 1943: 18–21, Figure 16). Like tokens, they belonged to the area of workshops and storehouses of the Susa II temple precinct (Amiet 1972a: 67), except for a unique exception in the north (Amiet 1972b: 92:549). Seventeen complete or fragmentary examples were located in 1977 in the ruins of an ordinary structure (Le Brun 1978c: 62–4; Le Brun and Vallat 1978: 13–18, Figure 3, Pl. I-III).

The envelopes finally combined tokens and seals together on the same artifact (Amiet 1972a: 69–70; 1972b: Pl. 61–88), each with a different purpose. Inside, the tokens stood for the quality and quantity of the goods dealt with; outside, the seals indicated the relevant authorities or offices involved. The typical Susa II seals in the shape of a small stone cylinder may have been invented specifically to be rolled around the envelopes. A single, two and even three different cylinder seal impressions systematically covered the entire surface of each envelope, but there are also examples of both stamp and cylinder seal impressions on the

same envelope. Among the innumerable scenes carved on cylinder seals appears the “En,” the awesome priest-king of Uruk (Amiet 1986: 61), who was certainly heading the redistribution economy, since the sign for his title appears on the Uruk tablets (Green and Nissen 1987: 197). The personage is easy to identify by his size, greater than the rest of the mortals, and his unique round headdress and long skirt (Schmandt-Besserat 1993: 209–210). On an envelope from Chogha Mish, the “En” is depicted riding in a boat, holding two prisoners with a rope (Delougaz and Kantor 1996a: 146; 1996b: 151) ([Figure 18.7A](#)). At Susa, he stands in front of the temple, shooting arrows at Susians, recognizable by their long hair (Amiet 1972b: 18: 695) ([Figure 18.7 B](#)). Both compositions leave little doubt that the complex tokens and envelopes did not make their way from Uruk by peaceful trade.



[Figure 18.7 Sealings picturing the En, Priest-King of Uruk, in Greater Susiana. A. Chogha Mish \(after Delougaz et al. 1996b: Pl. 151: B\); B. Susa \(after Amiet 1980: p. 343, Pl.46: 659\).](#)

The clay envelopes were helpful in keeping tokens and sealing together, thus preventing the tokens to be separated or lost. However, once the envelopes were closed, it was no longer possible to verify their content without breaking them and tampering with the sealings. It is for this reason that envelopes were marked by imprinting tokens on their surface while the

clay was still soft ([Figure 18.8](#)). Markings were never used systematically. In Iraq, none of the 25 envelopes from Uruk were marked, but in Syria, both examples from Habuba Kabira were. In Iran, there were 12 marked envelopes in Susa and one in Tepe Yahya. Several of the envelopes of level 18 of Susa had markings, but those of the later level 17 did not.

The impressed markings indicated both the shape and number of tokens enclosed inside the envelopes. For example, three cones and three spheres were shown by three wedges and three circular markings, in one-to-one correspondence. The value of the impressed markings was the same as that of the tokens they represented: a wedge equaled the same small measure of grain as a cone token and a circular marking equaled the same large measure of grain as a sphere token. Three large and three small measures of grain, formerly indicated by three spheres and three cones became represented by three circular markings and three wedges. The function of the impressed markings was identical to that of the loose tokens. They communicated to accountants the exact same information, concerning small and large measures of grain, jars of oil and heads of small cattle. The markings served to manage the same goods in the same quantities for the same redistribution economy. This was the Susa II or Uruk redistribution economy celebrated by art ([Figure 18.1A-E](#)).



[Figure 18.8 Envelope from Susa, Sb 1940. Courtesy Musée du Louvre, Département des Antiquités Orientales, Paris.](#)

The markings on envelopes were an ingenious solution to a simple archival problem, but they forever changed accounting, management, administration and communication. The markings were the third metamorphosis in the 4,000-year evolution of tokens. Starting first with plain shapes, and secondly, evolving to complex forms, the tokens were finally reduced to two-dimensional impressed markings. This was writing: civilization was under way.

Conclusion

Cooperation is the hallmark of humanity (Wilson 2014: 28). Our hunter ancestors left behind all other primates by sharing resources rather than fighting for them. Sharing meat among hunters was simple and immediate. It took place upon the hunters' return, as the game was butchered (Marshall 1976: 357–363). There was no need for counting since each cut was traditionally assigned to a particular individual of the band.

Sharing resources did not stop with the agriculture revolution. On the contrary, it further advanced when the first farmers initiated a redistribution economy mostly based on cereals and small cattle. The operation was complex because multiple households contributed and consumption was deferred over weeks or months. The new economy required a new leadership of managers able to administer the communal wealth by 1. Establishing the amounts of goods to be contributed by the community; 2. Controlling the deliveries; 3. Protecting the reserves from weather, rodents, raids and thieves; 4. Overseeing the redistribution. The leaders adopted tokens to count and control the communal resources at each step of the process.

The sites of Susiana and Deh Luran illustrate with surprising clarity the evolution of administrative technologies to implement the redistribution economy in Greater Susiana. Tokens were adopted at the same time as agriculture in the first levels of occupation of Ali Kosh and Chogha Bonut, ca. 7200 BC. Two millennia passed until the management of goods with plain tokens was complemented by stamp seals to communicate official information from an office or a person. The establishment of a temple at Susa, ca 4000 BC, did not cause any change in the plain tokens or stamp seals because it still relied on an agrarian economy. The next groundbreaking steps in administrative technologies – complex tokens and cylinder seals – came together to Greater Susiana from the neighboring Mesopotamian metropolis of Uruk. The new technologies were adapted to an urban economy.

The ancient Near Eastern redistribution economy should be viewed as a major landmark in the history of mankind. Its significance and complexity brought humans to count and discover the world of numbers. In turn, counting was the first cognitive step towards writing.

Acknowledgment

The chapter has been written in collaboration with Niloufar Moghimi, PhD candidate in the Prehistoric Archaeology of Iran, Department of Archaeology, the University of Tehran, moghimi.nilufar@ut.ac.ir. I am particularly grateful to Ms Moghimi for contributing her knowledge on the recent excavations in Iran. I also much appreciated her insights in the interpretation of the Susa token collection.

Note

Bibliography

- Alizadeh, A. 2003. *Excavations at the Prehistoric Mound of Chogha Bonut, Khuzestan, Iran, Seasons 1976/77, 1977/78 and 1996*. Oriental Institute Publications 120. Chicago: The Oriental Institute of the University of Chicago.
- . 2005. *The Origins of State Organizations in Prehistoric Highland Fars, Southern Iran: Excavations at Tall-e Bakun*. Oriental Institute Publications 128. Chicago: The Oriental Institute of the University of Chicago.
- . 2008. *Chogha Mish II, The Development of a Prehistoric Regional Center in Lowland Susiana, Southwestern Iran, Final Report on the last six seasons of excavations, 1972–1978*. Oriental Institute Publications 130. Chicago: The Oriental Institute of the University of Chicago.
- . 2014. *Ancient Settlement Systems and Cultures in the Ram Hormuz Plain, Southwestern Iran, Excavations at Tall-e Geser and Regional Survey of the Ram Hormuz Area*. Oriental Institute Publications 140. Chicago: The Oriental Institute of the University of Chicago.
- Alizadeh, A., Kouchouros, N., Wilkinson, T.J., Bauer, A.M. and Mashkour, M. 2004. Human Environment Interactions on the Upper Khuzestan Plains, Southwest Iran. Recent Investigations. *Paléorient* 30/1: 69–88.
- Alizadeh, A., Aghili, S. and Sarlak, S. 2015. Highland-lowland Interaction in the Late 4th and Early 3rd millennium BCE: The Evidence from Qoli Darvish, Iranian Central Plateau. *Archaeologische Mitteilungen aus Iran und Turan* 45: 149–68.
- Álvarez-Mon, J. 2012. Elam: Iran's First Empire. In: Potts, D.T. (ed.) *A Companion to the Archaeology of the Ancient Near East*. London: Blackwell, 740–57.
- . 2013. Khuzestan in the Bronze Age. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press, 217–62.
- Amiet, P. 1966. *Elam*. Auvers-sur-Oise: Archée Éditeur.
- . 1972a. *Glyptique susienne des origines à l'époque des Perses Achéménides*, Vol. I. Texte. Mémoires de la Délégation Archéologique en Iran 43. Paris: Paul Geuthner.
- . 1972b. *Glyptique susienne des origines à l'époque des Perses Achéménides*, Vol. II Planches. Mémoires de la Délégation Archéologique en Iran 43. Paris: Paul Geuthner.
- . 1980. *La glyptique mésopotamienne archaïque*. Paris: Éditions du CNRS.
- . 1985. A propos de l'usage et de l'iconographie des sceaux à Suse. *Paléorient* 11/2: 37–8.
- . 1986. *L'âge des échanges inter-iraniens 3500–1700 avant J.-C.* Paris: Éditions de la Réunion des Musées Nationaux.
- Belaiew, N.T. 1933. Métrologie Élamite, Examen Préliminaire des Documents Pondéraux, Fouilles de Suse 1921–1933. In: Scheil, V. *Actes Juridiques Susiens, II. Inscriptions Achéménides*. Mémoires de la Mission Archéologique de Perse 24. Paris: Librairie Ernest Leroux.
- Canal, D. 1978a. La terrasse haute de l'Acropole de Suse. *Cahiers de la Délégation Archéologique Française en Iran* 9: 11–56.
- . 1978b. La Haute Terrasse de L'Acropole de Suse. *Paléorient* 4: 169–176.
- Carter, E. and Stolper, M.W. 1984. *Elam: Surveys of Political History and Archaeology*. Berkeley: University of California Press.

- Darabi, H. and Glascock, M.D. 2013. The Source of Obsidian Artefacts Found at East Chia Sabz, Western Iran. *Journal of Archaeological Science* 40/10: 3804–3809.
- Delougaz, P. and Kantor, H.J. 1996a. *Chogha Mish Volume 1, The First Five Seasons of Excavations 1961–1971*, Part 1: Text, edited by Abbas Alizadeh. Oriental Institute Publications 101. Chicago: The Oriental Institute of the University of Chicago.
- . 1996b. *Chogha Mish Volume 1, The First Five Seasons of Excavations 1961–1971*, Part 2: Plates, edited by Abbas Alizadeh. Oriental Institute Publications 101. Chicago: The Oriental Institute of the University of Chicago.
- Dollfus, G. 1971. Les Fouilles à Djaffarabad de 1969 à 1971. *Cahiers de la Délégation Archéologique Française en Iran* 1: 17–161.
- . 1975. Les Fouilles à Djaffarabad de 1972 à 1974. *Cahiers de la Délégation Archéologique Française en Iran* 5: 11–220.
- . 1978. Djaffarabad, Djowi, Bendebal: Contribution à l'Etude de la Susiane au Ve Millénaire et au Début du IVe Millénaire. *Paléorient* 4: 141–167.
- . 1983. Djowi et Bendebal, Deux Villages de la Plaine Centrale du Khuzistan (Iran) (5e Millénaire avant J.C.). *Cahiers de la Délégation Archéologique Française en Iran* 13: 17–276.
- Dyson Jr., R.H. 1966. *Excavations on the Acropolis at Susa and Problems of Susa A, B, and C*. PhD Diss., Harvard University.
- . 1987. The Relative and Absolute Chronology of Hissar II and the Proto-Elamite Horizon of Northern Iran. In: Aurenche, O., Evin, J. and Hours, F. (eds.) *Chronologies in the Near East: Relative Chronologies and Absolute Chronology 16000–14000 B.P.* BAR International Series 379 (II). Oxford: Archaeopress, 647–678.
- Ghirshman, R. 1938. *Fouilles de Sialk*, I. Paris: Paul Geuthner.
- Green, M.W. and Nissen, H.J. 1987. *Zeichenliste der Archaischen Texte aus Uruk*. Archaische Texte aus Uruk 2. Berlin: Gebr. Mann Verlag.
- Hakemi, A. 1972. Catalogue de l'Exposition: Lut Xabis (Shahdad). In: *Premier Symposium Annuel de la Recherche Archéologique en Iran*. Teheran.
- Harper, P.O., Aruz J. and Tallon, F. 1992. *The Royal City of Susa*. New York: The Metropolitan Museum of Art.
- Hayden, B. 2014. *The Power of Feasts from Prehistory to the Present*. Cambridge: Cambridge University Press.
- Herskovits, M.J. 1938. *Dahomey: An Ancient West African Kingdom*. Vol. 1. New York: J. J. Augustin.
- Hessari, M. 2011. New Evidence of the Emergence of Complex Societies Discovered on the Central Iranian Plateau. *Iranian Journal of Archaeological Studies* I/2: 35–48.
- Hessari, M. and Yusefi Zoshk, R. 2009. Emergence of Pre-Governmental Institution in the Central Plateau of Iran: Ruling Lords in the Proto-Elamite Period at Pishva's Tepe Sofalin. *Journal of Archaeological Studies* 1/2: 1–22 (in Persian).
- حصاری، مرتضی؛ یوسفی زشک، روحانده. 1388. پیدایش نهادهای پیش حکومتی در فلات مرکزی ایران؛ خان سالارهای آغاز ایلامی در تپه سفالین پیشوا. مجله مطالعات باستانشناسی، دوره 1 / شماره 2، جلد 2: 22–1.
- Hole, F. 1977. *Studies in the Archeological History of the Deh Luran Plain, The Excavation of Chagha Sefid*. Memoirs of the Museum of Anthropology, University of Michigan 9. Ann Arbor: University of Michigan.
- . 1990. Cemetery or Mass Grave? Reflections on Susa I. In: Vallat, F. (ed.) *Contribution à l'histoire de l'Iran, Mélanges offerts à Jean Perrot*. Paris: Editions Recherches sur les Civilisations, 1–14.
- . 2008. Ritual and the Collapse of Susa, ca. 4000 BC. *Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East: Madrid, April 3–8, 2006* (Vol.2). Madrid: Ediciones Universidad Autonoma de Madrid: Centro

- Superior de Estudios sobre el Oriente y Egipto, 165–178.
- . 2010. A Monumental Failure: The Collapse of Susa. In: Carter R.A. and Philip, G. (eds.) *Beyond the Ubaid: Transformation and Integration in the late prehistoric societies of the Middle East*. Studies in Ancient Oriental Civilization. Chicago: The Oriental Institute of the University of Chicago, 227–243.
- Hole, F., Flannery, K.V. and Neely, J.A. 1969. *Prehistory and Human Ecology of the Deh Luran Plain*. Memoirs of the Museum of Anthropology 1. Ann Arbor: University of Michigan.
- Johnson, G.A. 1973. *Local Exchange and Early State Development in Southwestern Iran*. Memoirs of the Museum of Anthropology 51. Ann Arbor: University of Michigan.
- . 1976. Uruk Villages on the Susiana Plain. *Iran* 14: 171–172.
- Kantor, H. 1976. The Excavations at Chogha Mish, 1974–1975. In: Bagherzadeh, F. (ed.) *Proceedings of the 4th Annual Symposium on Archaeological Research* 4, Tehran: Iranian Center for Archaeological Research, 23–41.
- Le Brun, A. 1978a. La Glyptique du Niveau 17B de l'Acropole (Campagne de 1972). *Cahiers de la Délégation Archéologique Française en Iran* 8: 61–79.
- . 1978b. Suse, Chantier "Acropole 1". *Paléorient* 4: 177–192.
- . 1978c. Le Niveau 17B de l'Acropole de Suse (Campagne de 1972). *Cahiers de la Délégation Archéologique Française en Iran* 9: 57–154.
- . 1985. Le Niveau 18 de l'Acropole de Suse. Mémoires d'Argile, Mémoires du Temps. *Paléorient* 11/2: 31–36.
- Le Brun, A. and Vallat, F. 1978. L'Origine de l'Écriture à Suse. *Cahiers de la Délégation Archéologique Française en Iran* 8: 11–59.
- Legrain, L. 1921. *Empreintes de Cachets Élamites* Mémoires de la Mission Archéologique de Perse 16. Mission en Susiane. Paris: Ernest Leroux.
- Leick, G. 2002. *Mesopotamia, The Invention of the City*. London: Penguin Books.
- Marshall, L. 1976. Sharing, Talking, and Giving: Relief of Social Tensions among the !Kung. In: Lee, R.B. and De Vore, I. (eds.) *Kalahari Hunter-Gatherers*. Cambridge, MA: Harvard University Press, 349–371.
- Mecquenem de, R. 1924. Fouilles de Suse (campagnes 1923–1924). *Revue d'Assyriologie et d'Archéologie Orientale* 21/3: 105–118.
- . 1943. Fouilles de Suse, 1933–1939. In: Mecquenem de, R., Contenau, G., Pfister R. and Belaiew, N. (eds.) *Archéologie Susienne*. Mémoires de la Mission Archéologique en Iran 29 Mission de Susiane. Paris: Presses Universitaires de France, 3–161.
- Moghaddam, A. 2012a. Southwestern Iran. In: Potts, D.T. (ed.) *A Companion to the Archaeology of the Ancient Near East*. London: Blackwell, 512–530.
- . 2012b. *Later Village Period Settlement Development in the Karun River Basin, Upper Khuzestan Plain, Greater Susiana*. Oxford: Bar International Series 2347.
- Moghim, N. 2015. An Archaeological Study on Accounting Systems in Prehistoric Human Societies of the Qazvin Plain: The Case of Tepe Zagheh. *Journal of Archaeological Studies* 7/1 issue 11: 127–146 (in Persian).
- مقیمی، نیلوفر. 1394. بررسی باستانشناختی سامانه حسابداری در جوامع انسانی پیش از تاریخ دشت قزوین: مورد مطالعاتی تپه زاغه. *مجله مطالعات باستانشناسی*، دوره 7 / شماره 1، جلد 11: 127–146.
- Moghim, N. and Fazeli, H. 2015. An Archaeological Study of the Tokens from Tepe Zagheh, Qazvin Plain, Iran. *International*

- Morgan de, J., Jéquier, G., Mécquenem de, R., Haussoullier, B. and Graadt Van Roggen, D.L. 1905. *Recherches Archéologiques*. 2e série, Mémoires de la Délégation en Perse 7. Paris: Ernest Leroux.
- Mutin, B. 2013. *The Proto-Elamite Settlement and its Neighbors*. Oxford: Oxbow books.
- Nissen, H.J. 1985. Problems of the Uruk-Period in Susiana, Viewed from Uruk. *Paléorient* 11/2: 39–40.
- . 1988. *The Early History of the Ancient Near East, 9000–2000 B. C.* Chicago: The University of Chicago Press.
- Nissen, H.J. and Heine, P. 2003. *From Mesopotamia to Iraq*. Chicago: The University of Chicago Press.
- Overmann, K.A. (n.d.) Unpublished Token Catalogue, Cambridge, UK.
- Petrie, C.A. 2013. Ancient Iran and its Neighbours: The State of Play. In: Petrie, C.A. (ed.) *Ancient Iran and its Neighbours*. British Institute of Persian Studies. Monographs Series III. Oxford: Oxbow books.
- Pollock, S. 1999. *Ancient Mesopotamia*. Cambridge: Cambridge University Press.
- Potts, D.T. 1999. *The Archaeology of Elam*. Cambridge: Cambridge University Press.
- Sardari Zarchi, A. and Rezaiee, A. 2007. Preliminary Report on the Archaeological Excavations at Tepe Mehr Ali Farsi, Summer and Fall 2006. *Proceeding of Research Week*. Iranian Center for Archaeological Research, ICHTO, Tehran, Iran: 13–19. (in Persian).
- سرداری زارچی، علیرضا؛ رضایی، عزیزالله. (1385). گزارش مقدماتی کاوشهای باستانشناسی تپه مهر علی فارسی، تابستان و پائیز 1385. در مجموعه مقالات هفته پژوهش، پژوهشکده باستانشناسی کشور ایران، تهران: 13–19.
- Sarlak, S. 2011. *Archaeology and History of Qom*. Qom: Shakhsh publication, Cultural Heritage, Tourism and Handicrafts organization of Qom Province, Iran (in Persian).
- سرلک، سیامک. 1390. باستانشناسی و تاریخ قم. اداره کل میراث فرهنگی، صنایع دستی و گردشگری استان قم: انتشارات شاخص.
- Schmandt-Besserat, D. 1992a. *Before Writing 1 From Counting to Cuneiform*. Austin: The University of Texas.
- . 1992b. *Before Writing 2 A Catalogue of Near Eastern Tokens*. Austin: The University of Texas.
- . 1993. Images of Enship. In: Frangipane, M., Hauptmann, H., Liverani, M., Matthiae, P. and Mellink, M. (eds.) *Between the Rivers and Over the Mountains*. Rome: Università di Roma “La Sapienza”. Dipartimento di Scienze Storiche Archeologiche e Antropologiche dell’Antichità, 201–219.
- . 1996. *How Writing Came About*. Austin: The University of Texas Press.
- . 2001. Feasting in the Ancient Near East. In: Dietler, M. and Hayden, B. (eds.) *Feasts, Archaeological and Ethnographic Perspectives on Food, Politics, and Power*. Washington: Smithsonian Institution Press, 391–403.
- Steve, M.-J. and Gasche, H. 1971. *L’Acropole de Suse, Nouvelles Fouilles*. (Mémoires de la Délégation Archéologique en Iran, Mission de Susiane 46) Paris: Paul Geuthner.
- Steve, M.-J. and Gasche, H. 1990. Le Tell de l’Apadana avant les Achéménides. In: Vallat, F. (ed.) *Contribution à l’histoire de l’Iran, Mélanges offerts à Jean Perrot*. Paris: Editions Recherche sur les Civilisations, 15–32.
- Steve, M.-J., Vallat, F. and Gasche, H. 2003. La Découverte de Suse: Les données archéologiques. *Dictionnaire de la Bible. Supplément* 73: 375–403.
- Thornton, C.P., Gursan-Salzmann, A. and Dyson Jr., R.H. 2013. Tepe Hissar and the Fourth Millennium of North-Eastern Iran. In: Petrie, C.A. (ed.) *Ancient Iran and its Neighbours*. British Institute of Persian Studies, Archaeological Monographs Series III. Oxford: Oxbow Books, 131–144.
- Vallat, F. 1978. Le Matériel Épigraphique des Couches 18 à 14 de l’Acropole. *Paléorient* 4: 193–195.

- . 1980. *Suse et l'Elam. Recherche sur les grandes civilisations, Études Élamites*. Mémoire 1. Paris: Editions ADPF.
- . 1993. *Répertoire Géographiques des Textes Cunéiformes XI*. Wiesbaden: Dr. Ludwig Reichert Verlag.
- Wilson, E.O. 2014. *The Meaning of Human Existence*. London: Liveright Publishing Corporation.
- Wright, H.T. 1981. *An Early Town in the Deh Luran Plain: Excavations at Tepe Farukhabad*. Memoirs of the Museum of Anthropology 13. Ann Arbor: The University of Michigan.
- Wright, H.T. and Johnson, G.A. 1985. Regional Perspectives on Southwest Iranian State Development. *Paléorient* 11/2: 25–30.
- Wright, H.T., Miller, N. and Redding, R. 1980. Time and Process in an Uruk Rural Center. In: Barrelet, M.T. (ed.) *L'Archéologie de l'Iraq au Début de l'Époque Néolithique A 333 Avant Notre Ère*. Colloques Internationaux du Centre National de la Recherche Scientifique No. 580. Paris: Éditions du Centre National de la Recherche Scientifique, 265–282.

CHAPTER NINETEEN

The proto-Elamite writing system



Jacob L. Dahl

Introduction

We can trace the origins of the proto-Elamite writing system back to those administrative artefacts that we regard as forerunners to writing, dating to the so-called Uruk V period, and to the earliest proto-cuneiform texts from the Uruk IVb period (3550–3200 BC). The use of those administrative artefacts and early tablets, most likely invented in the southern Babylonian city of Uruk after which they are named, spread far and wide across the Ancient Near East, including into western Iran. The proto-Elamite texts (3100–2900 BC), the conventional name given to the earliest distinctively non-Uruk texts from Iran, share a number of features with the earlier Uruk texts, such as the shape and use of most of the numerical signs, and the technique of writing. However, there are also significant differences between the proto-Elamite tablets and both the preceding Uruk V and IVb texts, and the contemporary Uruk IVa and III (including the texts from Jemdat Nasr) texts from southern Mesopotamia, so much so, in fact, that proto-Elamite is an entirely separate writing system, and no contact between the two systems can be detected after the Uruk IVa period. Proto-Elamite remains largely undeciphered, and a true decipherment, in the linguistic sense of the word is unlikely to ever be achieved given the feeble link between writing and speech at this early point in the history of writing (Damerow 2006). However, the content of many proto-Elamite texts is understood, and the corpus provides rich information on both social and economic aspects of life in early Iran, and about the intellectual advances of early man.

Definition

Not all examples of early, non-cuneiform writing from Iran can be classified as proto-Elamite. Whereas it is relatively simple to identify a standard and late proto-Elamite text or fragment, it is rather more difficult to determine whether a very early text from western Iran belongs to the trans-regional Uruk V or IVb-a tradition, or is a forerunner to the proto-Elamite texts or

even an early example of the proto-Elamite texts. This is perhaps best illustrated by the small group of text artefacts recovered from Tepe Sialk by Roman Ghirshman: only five of the 23 tablets and fragments from Sialk can be classified as proto-Elamite (Sialk 2, 1621, 1624, 1626, and 1630; *pace* Glassner 1998), while the rest are numero-ideographic or numerical tablets of the Uruk V or IVb period. However, even within the group of numero-ideographic tablets, a transitional group of texts so named by Englund, because they were similar to the numerical tablets of Uruk V, but with one or two non-numerical signs (Englund 1998: 51–56), it may be possible to suggest that tablets from Iran and tablets from Mesopotamia can be differentiated, since the order of numerical signs and non-numerical signs seems to anticipate the later distinction (Dahl 2013: 233).

The date of the loan of writing from the Uruk culture by scribes in Iran writing in the indigenous writing system proto-Elamite is equally difficult to pinpoint. In 2004 Englund suggested that the choice at Susa of writing a particular sign in the numerical system representing a fraction of the basic 1-unit sign (when used in the sexagesimal system counting discrete objects but representing probably one month of rations when used in the capacity system) indicated contact between the users of the two writing systems up until and during the Uruk IVa – Susa 17 period (Englund 2004: 125–127). Until then Uruk scribes seem to have freely alternated between two versions, each facing the opposite direction, but after that time Uruk scribes fixed the direction of the sign in one way only and opposite to the way the sign is used in Susa. Another similar indicator for the discontinuation of contact after the Uruk IVa period is the way in which the line rulings were made in the two corpora (Englund 2004: 126): in Uruk IVb-a texts line dividers were made by pressing the shank of the stylus into the clay, whereas on Uruk III tablets, lines were drawn with the pointed edge of a stylus; line dividers in the proto-Elamite tablets were always made like those in the Uruk IVb-a corpus, suggesting that contact between the two systems broke during or at the end of the Uruk IVa period.

Syntax

Syntactically there are two major differences between proto-cuneiform texts (i.e. the early texts from Uruk and the Uruk period texts found elsewhere, including in western Iran), and the proto-Elamite texts. Firstly, whereas the global structure of proto-cuneiform and proto-Elamite texts is similar – texts have headers, are divided into entries with possible subentries, and are usually totalled – proto-cuneiform texts are organized in visual hierarchies (Damerow 2006), but linearly strung in the proto-Elamite texts. Secondly, the numerical notation precedes the non-numerical notation it qualifies in proto-cuneiform texts but follows the notation it qualifies in proto-Elamite texts. Whereas these differences may give hints at the amounts of linguistic data coded in the two scripts, where proto-Elamite with its linear structure perhaps is better suited to conveying linguistic information, it does not necessarily reveal anything

about the underlying language. In the much later cuneiform texts from Mesopotamia written in Sumerian, numerical notations continue to precede the non-numerical notations they qualify, although adjectives, and also numbers, in the Sumerian language follow the nouns they qualify.

Chronology

The proto-Elamite texts can be divided into a number of groups that relate to chronological distribution rather than geographical distribution or the content of the texts. When paired with information from the old excavations of Susa (Jacques de Morgan [1897–1911], and Roland de Mecquenem [1911–1940], interrupted by the First World War; Roman Ghirshman's excavations of Susa following the Second World War are of little importance for the study of proto-Elamite) and the later excavations of Jean Perrot and Alain LeBrun (1967–1979), it is relatively safe to conclude that these groups correlate roughly to Susa Acropolis 17 for the oldest texts, Susa Acropolis 16–15 for the middle group, and Susa Acropolis 15–14 for the late texts (see Dahl, Petrie and Potts 2013: Figure 18.17). Difficulties remain, in particular with the very oldest texts (Dahl, Petrie and Potts 2013: 358 and 371 and Figure 18.17), none of which were found in the stratigraphically secure excavations of LeBrun, as well as with the very latest texts. Texts from both of these groups are differentiated particularly based on internal features of the texts. For the earliest texts, these features are the higher numbers of signs occurring only once (*hapax legomena* or singletons) and the shortness of the texts and the entries of the texts, as well as the simpler structure of the documents and the lack of headers and totals as well as subscripts, and finally the often clumsy execution of the signs. For the latest texts, the exact opposite is the case: the strings of signs are long and can often be broken down into separate units, texts can have very complex structure with main entries and subentries, and the signs are generally uniformly executed. Such observations, without the corroborating evidence from the excavations, would perhaps be insufficient to determine the chronological distribution of the tablets, but since these groups map fairly well onto those examples of proto-Elamite tablets that do come from well-controlled excavations at Susa and elsewhere, the divisions appear to be correct.

Geographical distribution

Proto-Elamite texts have been found in excavations across Iran, with a distribution pattern which suggests two paths of diffusion. Early proto-Elamite tablets are only found at sites in the Susa plain and at Tepe Sialk (and possibly at Tepe Sofalin, see Dahl, Hessari and Yousefi 2013: 68). Similarly, tablets from the earliest part of the mature or standard type are only

found at Susa, Sialk, and Ozbaki, whereas standard and late tablets are found both at Susa, Tepe Sofalin, Yayha, Malyan, and Sarh-i-Sohkte, suggesting that proto-Elamite spread first along a northern and north-eastern route, and only later through a southern route. It is difficult to estimate what, if any, importance these observations may have for the understanding of the diffusion of proto-Elamite, except for confirming that the writing system was in all likelihood invented at Susa. Theories of diffusion need to take into consideration that the content of the texts in both Susa and in other sites does not include any references to trade or warfare, but is restricted to household economies.

More than 1,600 tablets and fragments excavated at Susa have been published (MDP 6, 17, 26, 31, Mecquenem 1956 and Dahl *in press*); an unknown number of fragments from the early excavations remain unpublished in both the Louvre Museum and in Museums in Iran (NMI and Susa museum). The other sites across Iran have produced much more modest numbers of proto-Elamite texts with Tal-e Malyan and Tepe Yahya yielding 33 and 27 texts each (see Stolper 1985 for Malyan, and Damerow and Englund 1989 for Yahya); Tal-e Ghazir, Shahr-e-Sokhta, and Tepe Ozbaki yielded one each (Whitcomb 1971: 37, Pl 11A.; cf. Alden 1982 for Ghazir; Salvatori, Tosi and Vidale 2001: 36 for Sokhta; Vallat 2003 for Ozbaki); and Sialk yielding 23 tablets but only five proto-Elamite tablets proper (Ghirshman 1934: 116; 1938: 85, Pls. 92–93). Recent excavations at Tepe Sofalin have yielded substantial numbers of proto-Elamite tablets with the first 11 published recently (Dahl, Hessari and Yousefi 2013).

Content

As commented upon multiple times since the publication of Scheil in 1905, the content of all proto-Elamite texts is administrative (with the exception of two metro-mathematical texts, see Englund and Damerow 1989: 18–19, n. 51 and n. 53). Interestingly, the content is further restricted and covers only the production, storage, and distribution of food, and by extension the management of human laborers and animal flocks. The foodstuff mentioned in the texts is further restricted to cereal and plant products and dairy products, as well as possibly, but highly speculatively, meat. Texts concerning food production include possibly sowing or harvesting texts, rations for teams of workers doing field work, and texts documenting sheep and goat herding. Texts concerning food storage do not directly detail the content of, for example, granaries, or storerooms, but include enough circumstantial information to propose that foods were stored and records kept. Cereal and cereal products are distributed to both low-ranking and high-ranking members of society in what appears to be monthly rations. Dairy products are not recorded as being distributed. With the exception of dairy, most texts concerning food production, storage, and distribution seem to deal with cereals, most likely barley and/or wheat, but some texts may deal with other plants. Animal herding texts record flocks of sheep and goat, and the production of refined products from sheep and goats' milk,

as well as other products, perhaps hair and hides. Cows have not been identified in the textual record, although they are well represented on proto-Elamite seals and in the archaeological record from proto-Elamite layers in both Susiana and other parts of Iran. Similarly, the glyptic record includes fish, bulls and oxen, sheep and goats, lions and possibly other animals. Pigs are absent in both texts and image (Dahl 2015).

Information concerning the content of the texts is of course very useful for any attempts at decipherment, since it can remind us of what the possible restrictions in content may be. For example, if excavations from ancient Iran show very low numbers of bones from pigs in settlements dating to the same time as the proto-Elamite texts, and if the glyptic art of the period (seals and seal impressions) carries no obvious representations of pigs, then it is unlikely that pigs formed an important part of the food of the ancient people of Iran, and by extension unlikely that pigs were represented in the administrative texts. It is in this context interesting to note that also none of the signs in the writing system appear to be representations of pigs.

Decipherment

Traditionally, however, decipherment begins with establishing the corpus, producing verifiable transcriptions, and establishing the list of signs. That data is foundational for what is, in fact, rather simple analyses of number of discrete signs, sign frequencies, and eventually grapho-tactical analyses. Number of signs and sign frequencies can inform us about the class of writing system: whether it is logo-syllabic (such as Sumerian and Akkadian), syllabic (such as Minoan Linear B), or alphabetic (such as Phoenician), based simply on the numbers of discrete signs (Daniels and Bright 1996: 142–3). Grapho-tactical analyses on the other hand, investigating the relative placement of signs, can lead to an actual decipherment if the texts contain enough linguistic data (for an early example, see Cathcart 2011:1 §1.5 discussing the decipherment of *m* and *n* in Old Persian cuneiform by Rasmus Rask).

For proto-Elamite, establishing the corpus and producing exact transcriptions has been a relatively difficult task, but it is today almost complete: the vast majority of the proto-Elamite texts in the Louvre Museum have been made available online with high-resolution images and well-structured transliterations (see <http://cdli.ucla.edu> s.v. proto-Elamite), and it is hoped that a similar level of online coverage for the texts in Iran can go ahead in the near future; establishing a signlist on the other hand continues to represent significant problems (the most recently published sign list Meriggi 1974, forms the basis for my own sign list available online (see <http://cdli.ucla.edu>); all sign names used in this chapter refers to that list). This is in no small part due to the nature of the writing system and the limited level of standardization observable in the texts. Proto-Elamite has a high number of singletons, signs only found once, and the number does not tend to decrease with new publications but rather to increase (see

also Damerow 2006, and Dahl 2003). The reason for this can be found in the fact that proto-Elamite is not a fully developed writing system but rather a proto-writing system serving a very particular purpose for the administrators using it. As such, the proto-Elamite writing system had no use as a communicative system in the traditional sense. Texts were written with the author and his circle of administrators as intended readers (if the texts were ever intended to be read), and not administrators in other institutions or other settlements. New products, or new offices, were therefore described with new signs, either based on existing ones or entirely new signs. This is similar to the early stages of the proto-cuneiform texts from Uruk (V to IVb), whereas there is some standardization observable in the very latest Uruk tablets (Uruk IVa and III). Further problems establishing the correct list of signs exist, however. The proto-Elamite scribes loaned the method of writing, the medium, and the tools, as well as a majority of the numerical signs and systems, but only a few non-numerical signs (Englund 2004: Figure 5.14). That, combined with the fact that proto-Elamite had no successor system, makes it very difficult to differentiate semantic from graphical variants. Finally, the very shape of the signs presents a further problem. Students of proto-Elamite have remarked on the high number of abstract signs in the writing system, but more remarkable and problematic is the lack of signs representing humans, human bodies, or any part thereof (including the head). This omission, which is matched in the art (see Dahl 2014), leaves us without immediately decipherable signs such as HAND for “to give”, or EYE for “to inspect”, and so forth. The only exceptions are two signs that were part of the package of early signs borrowed from Mesopotamia. These two signs, SAL and KUR_a in proto-cuneiform, M72 and M388 in proto-Elamite, had presumably lost their immediate graphical referent by the time they were adopted in Iran (Damerow and Englund 1989: 55–57). The fact that proto-Elamite is thus devoid of signs such as HAND, or HEAD, significantly impairs our understanding of the texts. Similar signs have proven to be cornerstones in the decipherment of other scripts (Gelb and Whiting 1975: 101).

Structure of proto-Elamite documents

Structurally, the texts consist of up to five different sections (header, entries, total, top-edge inscription, and subscript). Simultaneously, the signs can be divided into four groups (numerical, owner, object, and possibly syllabic signs). Interestingly, and potentially important for the decipherment, the distribution patterns of sign groups and text sections is not random, and the main entries can be split further according to sign use. Most proto-Elamite tablets begin with a single, sometimes complex, sign that functions as a header for the entire text. This sign may indicate the household to which or person to whom the transactions belong (this is structurally similar to the colophon of proto-cuneiform texts see Englund 2004: 106, n. 12). In some instances, in particular in early texts, there is no header and we must surmise that

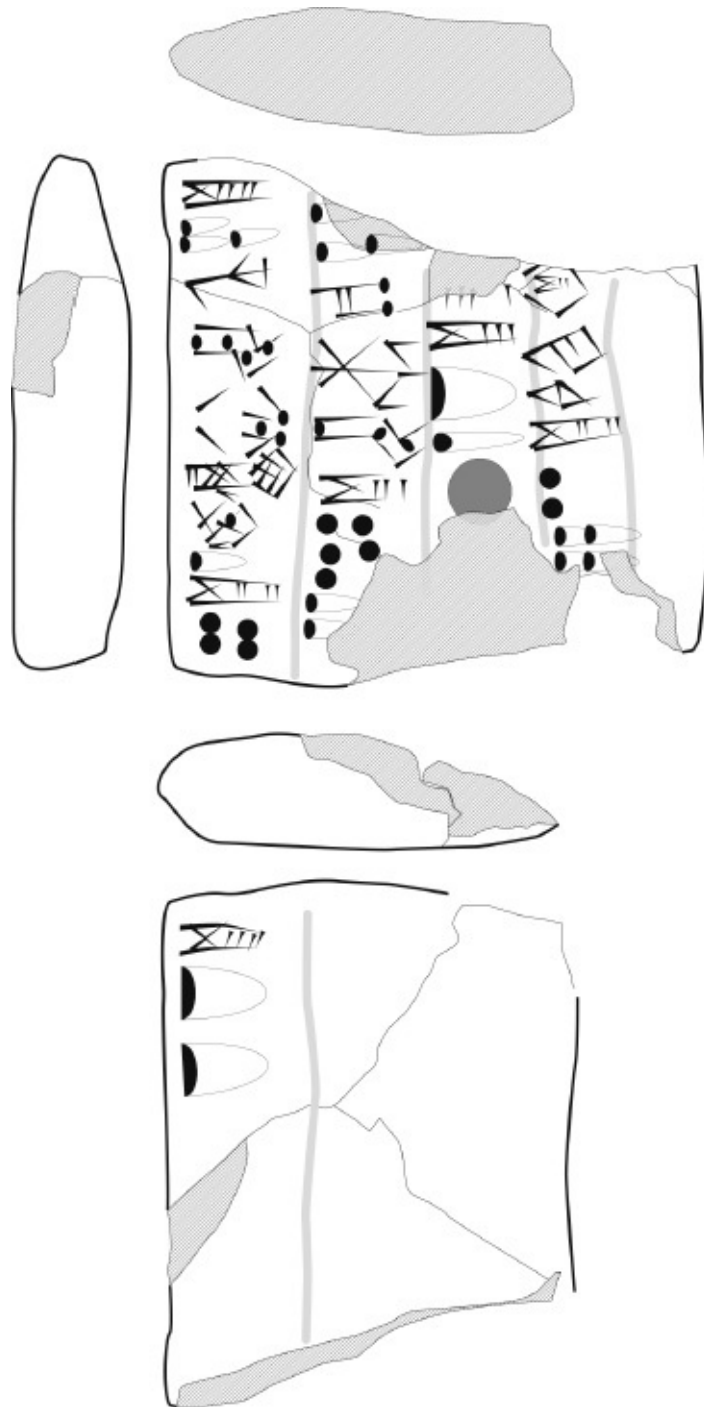
other factors such as storage location functioned as a replacement for a header. Following the header, a text can have any number of entries, from one to hundreds (see Dahl, Hawkins and Kelley *in press*, for a discussion of the longest proto-Elamite texts). The entries can be divided into subentries (see, for example, Hawkins 2015 for an example of this type of text). Where the entries and subentries of proto-cuneiform texts are written in boxes placed in a way that relates to the structure of the document, the same information is strung along in lines in continuous writing in proto-Elamite. All entries end with a numerical notation that qualifies a counted object, usually recorded by the last sign of the entry (note that in our transliterations we separate the entries as lines although these may span lines in the original document). Most proto-Elamite account entries are totaled. The totals can be complex, with multiple, different products individually totaled. The total is always written on the reverse of the tablet which is rotated around its horizontal axis. Because text from the obverse can spill over onto the reverse, rotating the tablet around its vertical axis, the text on the reverse of the tablets can run in two opposite directions, generally with a blank space between the two. A number of proto-Elamite texts have an inscription on the top edge of unknown meaning. Some proto-Elamite texts also include a subscript, after the final entry but before a total. Subscripts are identified by the lack of a qualifying numerical notation.

Semantic distinction of signs

Numerical signs

Except for a few derived numerical signs and one numerical system, proto-Elamite essentially used a restricted version of the Mesopotamian numerical system. Proto-Elamite used only seven systems compared to the 13 or more systems in use at Uruk; and only about half of the more than 60 distinct numerical signs attested at Uruk are found in proto-Elamite texts (Damerow and Englund 1989: 18–28).

The most important discrepancy between the Mesopotamian and Iranian numerical systems is the invention in Iran of a decimally based system. However innovative this system was, it nevertheless used signs from the other systems. This system seems to have been reserved for counting low-status objects such as herded animals and dependent workers, with the imported sexagesimal system reserved for high-status objects (Damerow and Englund 1989: 24; Englund 2004: 112).



[Figure 19.1 Sb 15188. Drawing of proto-Elamite tablet recording large amounts of cereals. Note that in publications proto-Elamite tablets are rotated 90° W. to conform with the direction of publication of all early cuneiform tablets.](#)

Owner signs

Continuing the semantic division of the signary, we can isolate a group of signs that stand for households. Among these we find perhaps the most famous proto-Elamite sign, the so-called hairy triangle sign (the basic sign is numbered M136; it always frames another sign). M136 has been understood as a sign for the ruler of a certain political entity, thus the variant M136g (M136 with an inscribed sign) has been identified as the sign of the ruler of Susa (Lamberg –

Karlovsky 1986). We should probably understand this sign as a graphical representation of the ruler's standard with his mark drawn inside of it. M136 and its variants appear on some proto-Elamite seals as well and is found both in the text and on the sealing of the important text Sb 2801 (see Pittman 1992: 75–76, the text remains unedited, but see the preliminary copy by K. Kelley on CDLI, P272825).

Object signs

Another semantically distinct group of signs are signs that represent objects. They are easily identified as being qualified by numerical notations and summarized in the totals. Only a few categories of object signs are easily identified using their graphical referent (signs depicting vessels, etc.), the rest can only be deciphered using a multifaceted approach, including comparison with proto-cuneiform texts, information from the numerical system used, and more (see Dahl 2005a and 2009).

Signs from all three groups, numerical signs, object signs, and owner signs, can have multiple semantic meanings: most importantly, perhaps, at least one numerical sign can also function as an owner sign, but several object signs can also function as owner signs.

Syllabic signs?

Finally, some signs were used in a complex way to describe owners. These signs, less than 100 in total, were composed primarily of signs not used in any other context. The few signs used in this way that indicate polyvalency, may eventually help the decipherment of proto-Elamite (see Dahl *in press*). The distribution patterns and the sign frequencies of this particular subset of the signary all points to it being a (primitive) syllabary (Dahl 2009; cf. Meriggi 1971).

Graphical shape of signs

Signs can also be described according to graphical shape (avoiding, of course, the dangers of “Schriftarchaeologie”). Proto-Elamite signs generally fall into one of the following four categories: loans from Mesopotamia or common origin signs (including numerical signs); signs depicting natural objects such as plants, plant parts, or animals; signs depicting cultural objects such as a yoke, a vessel, or a standard; and entirely abstract signs. However, it is clear that the semantic meaning of many of these signs is not immediately tied to their graphical referent.

A small number of signs and almost all the numerical signs and systems are either direct loans from proto-cuneiform or have a common origin (Englund 2004: Fig 5.14; Dahl 2013: 247). A majority of the non-numerical loans from the Uruk writing system seem to be cultural objects, such as signs for dependent workers, the plough, and certain vessels.

Object signs often depict natural objects, such as a plant, an animal, or a part thereof. There is no evidence for the existence of signs depicting humans or human body parts, as discussed above, and no conclusive evidence for signs depicting inanimate natural objects such as stones, rivers, or the like. Signs that are graphical representations of artifacts produced by humans may form the largest single group. Many, but not all, of these signs represent counted objects. The proliferation of signs belonging to this group may have been due to the way in which new signs could be generated. Another subgroup of signs depicting cultural objects are those that depict tools or instruments, however, none of these stand for the object they actually depict. For example, signs depicting a yoke may in fact stand for one or two workers or animals, and a sign depicting a plough may represent a team of workers or an area of land.

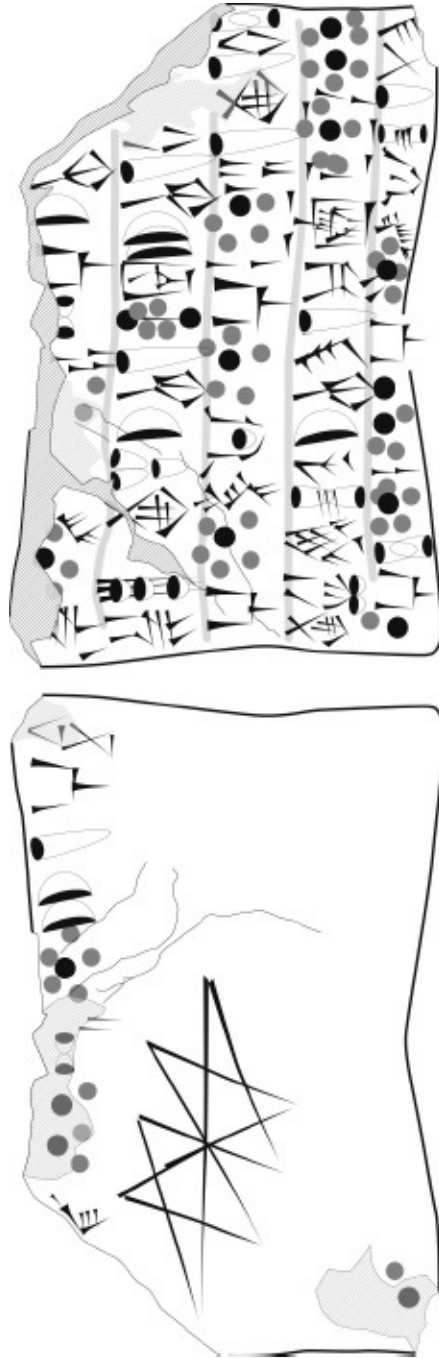
A large number of signs remain impossible to classify according to the criteria used above, and we are forced to judge them as abstract (Englund and Damerow 1989: 22). For most, we have probably failed to find the intended graphical referent, but there remain a number of signs whose use, in fact, suggests that they are entirely abstract.

Many signs in proto-Elamite consist of a combination of one or more otherwise discrete signs inscribed one within the other to form complex graphemes. This way of increasing the repertoire of signs and adding meaning to signs is well known from most other early writing systems (see, e.g., Wagensonner 2010: 299–302 for proto-cuneiform). Proto-Elamite, which lacks any signs of standardization, creates complex graphemes more freely than any other system. In proto-Elamite, complex graphemes can be formed in three different ways. A sign can be inscribed into another sign, a sign can be placed next to another sign (freely formed complex grapheme, pseudo-ligature), or one sign can be framed by another (Dahl 2005b). The first group is particularly productive and is found both for object signs – for example, a container sign inscribed with a numerical sign – and owner signs. The free formation of complex graphemes observed in proto-Elamite is likely to be a feature of the stage of writing to which proto-Elamite belongs.

Paratextual marks

A text is not only letters on a page; many different markings add to the way the text is read, and these are usually referred to as paratextual marks. Several different paratextual marks can be found on the proto-Elamite tablets. Some tablets have a double ruling running parallel to the top edge, others have a mark in one of the corners. The corner mark found is similar to that found on all 20 Uruk IV texts using the so-called EN – system (a particular numerical system of unknown properties, see Damerow and Englund 1987). On the proto-Elamite tablets, such a corner mark is usually found on the upper right corner (lower right according to the original direction of writing), and was usually made with the side of the stylus. Proto-Elamite lacks word dividers, and is written in *scriptio continua*, as most ancient scripts. Lines

are divided in most late texts using the side of a rounded stylus.



[Figure 19.2 Sb 22232. Proto-Elamite tablet with scribal design.](#)

Seals and scribal designs

Whereas the frequency with which proto-cuneiform tablets were sealed decreased during the Uruk III period, and seals eventually disappeared from the cuneiform record altogether for some 600–700 years, seal impressions are common on proto-Elamite tablets from all periods (except perhaps the very latest tablets). The changing use of seals in Mesopotamia may have

been in response to the growing complexity of the writing system.

The iconography of proto-Elamite seals was even more restricted than that of the Uruk period (for the Uruk material see Collon 1987: 14–15; Brandes 1979: 115–116; for the proto-Elamite material see Pittman 1997: 139–140), and can be broadly classified as geometric or figurative (see Pittman 2006 for a further distinction of the seals in to “classic style”, the “glazed steatite/piedmont style”, and the “incised and wheelcut style”). The scenes on the vast majority of figurative proto-Elamite seals include animals, real or imagined, either animals (in nature), mythical animals, processions of mythical and ordinary animals, and animals doing human tasks. The iconography of seals from the proto-Elamite period proper is entirely devoid of representations of human beings (some seals from Susa levels predating the proto-Elamite period, e.g., Susa Acropolis 18 and 17, have depictions of humans but none from the proto-Elamite levels, e.g., 16–14, *pace* Pittman 1992: 75; 2006: 29, and 2013: Figure 16:30 where several Uruk V style tablets are wrongly included in the proto-Elamite material; Amiet’s seal number 930 remains the only seal with representations of humans in the corpus, see Dahl 2014 for a discussion of this seal and the question of human representations in proto-Elamite seals). This lack of depictions of humans or human body parts accords well with other forms of proto-Elamite art which seem to prohibit depiction of the human body.

Decorative elements appear on some seals, alone or with animals. A few seals have “texts” consisting of a single sign from the writing system (e.g. the famous “seal of the ruler of Susa” on Sb 2801).

In a few instances, there seems to be an overlap between the glyptic scene of the seal and the administrative activities of the tablet on which the seal is rolled, suggesting that seal iconography was related to administrative duties. A few sheep and goat herding tablets were sealed with a seal whose imagery relates to goats (Dahl 2005a: 119). Further, the seal of the ruler with bull-man holding lions and lion-man holding bulls is found on extremely high-level texts such as Sb 2801.

On some late proto-Elamite tablets, we find a graphical design, often in the form of two intertwined geometric shapes, instead of a seal (Scheil 1923: 66–67 and Dahl 2012). These designs are attested on several tablets, with similar content. The presence of such a design precludes the rolling of a seal. The designs are placed in exactly the same areas on the tablets where we would expect to find a seal, namely, on the obverse after the text, or on the middle of the reverse. Most of these designs were included in the sign lists accompanying the early publications. An unpublished clay sealing from Tepe Sofalin has a rather similar design, but another clay sealing from the same site has a clumsily etched hairy triangle (see above). These finds challenge the way we understand the formation of early writing by suggesting a fluid interaction between writing and symbols used in society (Dahl 2012).

Summary

Writing is invented more times in Iran than in any other place in the world. When the pre-writing technologies of the Uruk expansion spread across the Ancient Near East they left perhaps their largest imprint on the culture then emerging in western Iran, and administrators there developed the writing system we today call proto-Elamite. However, this was a short-lived invention. The proposed development towards phoneticism, and thus the presumed increase in utility, did not prevent the sudden and rapid disappearance of the proto-Elamite writing system. Traditionally, the reason for the disappearance is sought in the collapse of the society which underpinned it. Unfortunately, the archaeological record from Susa and other sites in Iran does not directly, or univocally support such a scenario; the proposed abandonment of many Iranian sites in the beginning of the 3rd millennium BC is not alone proof of the collapse of the civilization of the proto-Elamite writing system, which existed in disparate and rather small settlements prior to this. It is possible that the lack of a lexical tradition, one of the most persistent traits of the cuneiform culture in neighboring Mesopotamia, could have contributed to the disappearance of the proto-Elamite writing system. The lack of standardization in proto-Elamite, compared to proto-cuneiform of the Uruk III period, and the seemingly higher number of errors in proto-Elamite compared to proto-cuneiform all suggest that proto-Elamite suffered from internal problems, which may have contributed to its disappearance. When writing emerged in Iran again it was in the form of cuneiform, used first to write Sumerian and Akkadian, and only secondarily the native language Elamite.

A few centuries after the reintroduction of writing into Iran, a few handfuls of odd objects attest to the emergence of what at first appears to be a new and indigenous writing system, the so-called linear-Elamite writing system. Most linear-Elamite inscriptions seem to be associated with a particular monument dedicated by the enigmatic Puzur-Inshushinak, with little evidence of a living tradition of writing in this script underpinning that usage. Similar, short-lived attempts at creating independent writing systems by rulers defining themselves through their peripheral relation to a presumed centre are well-known from across the globe and indifferent eras.

Millennia later, scribes attached to the court of the Achaemenid king Darius II invented the Old Persian syllabary to write Old Persian. Graphically, based on the cuneiform script, the Old Persian writing system seems also to have had a very limited scope, but its invention attests nevertheless to an extraordinary ingenuity rarely matched in other ancient civilizations.

Abbreviations

MDP Mémoires de la Délégation en Perse; Mémoires de la Mission archéologique de

Bibliography

- Alden, J.R. 1982. Trade and Politics in Proto-Elamite Iran. *Current Anthropology* 23: 613–640.
- Brandes, M. 1979. *Siegelabrollungen aus den archaischen Bauschichten in Uruk – Warka*, 2 vols, Freiburger altorientalische Studien 3. Wiesbaden.
- Collon, D. 1987. *First impressions: Cylinder seals in the Ancient Near East*. Chicago: University of Chicago Press.
- Cathcart, K.J. 2011. The Earliest Contributions to the Decipherment of Sumerian and Akkadian. *Cuneiform Digital Library Journal* 2011(1): 1–12.
- Dahl, J.L. 2003. Proto-Elamite sign frequencies. *Cuneiform Digital Library Bulletin* 2002:1.
- . 2005a. Animal Husbandry in Susa During the Proto-Elamite Period. *Studi Micenei ed Egeo-Anatolici* 47: 81–134.
- . 2005b. Complex graphemes in Proto-Elamite. *Cuneiform Digital Library Journal* 2005:3.
- . 2009. Early Writing in Iran, a Reappraisal. *Iran* 47: 23–31.
- . 2012. The Marks of Early Writing. *Iran* 50: 1–11.
- . 2014. The proto-Elamite seal MDP 16, pl. XII Figure 198. *Cuneiform Digital Library Notes* 2014:1.
- . 2015. The Production and Storage of Food in Early Iran. In: D’Anna, M.B., Jauß, C. and Johnson, J.C. (eds.) *Food and Urbanisation. Material and Textual Perspectives on Alimentary Practice in Early Mesopotamia*, Origini. Preistoria e protostoria delle civiltà antiche 37.1, 67–72.
- . In press. *Proto-Elamite Tablets and Fragments I: Heretofore Unpublished Proto-Elamite Texts in the Louvre Museum*, Textes cunéiformes du Louvre 32.
- Dahl, J.L., Hawkins, L.F. and Kelley, K. In press. Labor Administration in Proto-Elamite Iran. In: Garcia-Ventura, A. (ed.) *What’s in a Name? Terminology related to Work Force and Job Categories in the Ancient Near East*, Alter Orient und Altes Testament. 30 pages.
- Dahl, J.L., Hessari, M. and Yousefi, R. 2013. The Proto-Elamite Tablets from Tepe Sofalin. *Iranian Journal of Archaeological Studies* 2/1: 57–73.
- Dahl, J.L., Petrie, C.A. and Potts, D.T. 2013. Chronological parameters of the earliest writing system in Iran. In: Petrie, C.A. (ed.) *Ancient Iran and its Neighbours*. Oxford: Oxbow Books, 353–378.
- Damerow, P. 2006. The Origins of Writing as a Problem of Historical Epistemology. *Cuneiform Digital Library Journal* 2006:1.
- Damerow, P. and Englund, R.K. 1987. Die Zahlzeichensysteme der Archaischen Texte aus Uruk. In: Green, M.W. and Nissen, H.J. (eds.) *Zeichenliste der Archaischen Texte aus Uruk*, Archaische Texte aus Uruk 2. Berlin, 117–166.
- . 1989. *The Proto-Elamite texts from Tepe Yahya*. Cambridge: ASPR Bulletin 39.
- Daniels, P.T. and W. Bright. 1996. *The world’s writing systems*. New York: Oxford Univ. Press.
- Englund, R.K. 1998. Texts from the Late Uruk Period. In: Bauer, J., Englund, R.K. and Krebern timer, M. (eds.) *Mesopotamien. Späturuk – Zeit und frühdynastische Zeit*, Orbis Biblicus et Orientalis 160/1. Göttingen, 15–233.
- Englund, R.K. 2004. The state of decipherment of Proto-Elamite. In: Houston, S.D. (ed.) *The First Writing: Script Invention as*

- History and Process*. Cambridge: Cambridge University Press, 100–149.
- Gelb, I.J. and Whiting, R.W. 1975. Methods of Decipherment. *Journal of the Royal Asiatic Society* 107: 95–104.
- Ghirshman, R. 1934. Une tablette proto-élamite du plateau iranien. *Revue d'Assyriologie* 31: 115–119.
- . 1938/1939. *Fouilles de Sialk, près de Kashan, 1933, 1934, 1937*, 2 vols. Paris: Geuthner.
- Glassner, J.-J. 1998. Les tablettes dites 'urukéennes' de Sialk IV1. *Nouvelles Assyriologiques Brèves et Utilitaires* 113: 102–104.
- Hawkins L.F. 2015. A New Edition of the Proto-Elamite Text MDP 17, 112. *Cuneiform Digital Library Journal* 2015:1.
- Lamberg-Karlovsky, C.C. 1986. Third Millennium Structure and Process: From the Euphrates to the Indus and the Oxus to the Indian Ocean. *Oriens Antiquus* 25: 189–219.
- Mecquenem, R. de. 1956. Notes protoélamites. *Revue d'Assyriologie* 50/4: 200–204.
- Meriggi, P. 1971. *La scrittura proto-elamica. Parte I^a: La scrittura e il contenuto dei testi*. Roma: Accademia Nazionale dei Lincei.
- . 1974. *La scrittura proto-elamica. Parte I^a: Catalogo dei segni*. Roma: Accademia Nazionale dei Lincei.
- Pittman, H. 1992. Proto-Elamite Seals and Sealings. In: Harper, P.O., Aruz, J. and Tallon, F. (eds.) *The Royal City of Susa: Ancient Near Eastern Treasures in the Louvre*. New York: The Metropolitan Museum of Art, New York, 70–76.
- . 1997. The Administrative Function of Glyptic Art in Proto-Elamite Iran: A Survey of the Evidence. In: Gyselen, R. (ed.) *Sceaux d'Orient et leur emploi*, Res Orientales 10. Bures-sur-Yvette, 133–1361.
- . 2006. Proto-Elamische Kunstperiod (Proto-Elamite Art). In: Streck, M.P. (ed.) *Reallexikon der Assyriologie* 11/1–2. Berlin, 26–34.
- . 2013. Imagery in administrative context: Susiana and the west in the fourth millennium BC. In: Petrie, C.A. (ed.) *Ancient Iran and its Neighbours*. Oxford: Oxbow Books, 293–236.
- Salvatori, S., Tosi, M. and Vidale, M. 2001. Crocevia dell'Asia. L'Iran orientale e l'evoluzione delle civiltà protostoriche ad oriente della Mesopotamia. In: Gramiccia, A. (ed.) *Antica Persia, I Tesori del Museo Nazionale di Tehran e la Ricerca Italiana in Iran*. Rome: Edizioni de Luca, 32–37.
- Scheil, V. 1905. *Documents archaïques en écriture proto-élamite*, MDP 6. Paris.
- . 1923. *Textes de comptabilité proto-élamites*, MDP 17. Paris.
- Stolper, M.W. 1985. Proto-Elamite Texts from Tall-I Malyan. *Kadmos* 24: 1–12.
- Vallat, F. 2003. Un fragment de tablette proto-élamite découvert à Ozbaki, au nord-ouest de Téhéran. *Akkadica* 124: 229–231.
- Whitcomb, D.S. 1971. The Proto-Elamite period at Tall-i Ghazir, Iran. Unpublished M.A. thesis, Univ. of Georgia.
- Wagensonner, K. 2010. Early lexical lists revisited: Structures and classification as a mnemonic device. In: Kogan, L., Koslova, N., et al. (eds.) *Language in the Ancient Near East: Proceedings of the 53^e Rencontre Assyriologique Internationale*, vol. 1/1, Babel und Bibel 4A. Winona Lake: Eisenbrauns, 285–310.

CHAPTER TWENTY

Linear Elamite writing



François Desset

Introduction

Discovered at the beginning of the 20th century in the French excavations of Susa (Scheil 1905b), Linear Elamite writing had been for a long time associated with the Proto-Elamite tablets (de Mecquenem 1956: 200; Gelb 1963: 89) before being recognized by Hinz (1962) as an independent system (‘elamische Strichschrift’). Since it is still undeciphered today, the current label implying its use to record the Elamite language is quite misleading. For this reason, the label “LE writing” will be used here, to avoid the use of the glottonym Elamite (see Desset 2012).

First labelled by Scheil in 1905 with Latin alphabet letters, 32 LE inscriptions are currently known (Tab. 20.1 and Fig. 20.1). Of these, 18 were found in the old excavations of Susa,¹ one in Shahdad, four (or three) in Konar Sandal² and nine are without any known provenience (inscription Q might have been found near Persepolis; see Hinz 1969) and consequently suspected to be forged ([Figure 20.2](#)) (see Dahl 2009: 27 and Moqaddam 2009: 54). Assertions that a sherd found on the surface of Gonur Depe (Klochkov 1998: 165–167) and artefacts from Ra’s al Junayz in Oman (Glassner 2002a: 137–138 and 2002b: 363–368) are related to the LE writing are incorrect, and they will not be considered here. This chapter also includes the complete edition of the texts X, Y and Z, which were only partially published up to now (Mahboubian 2004: 50–55 and Desset 2012: 120–123), while the complete copies of W and A’ are still missing.

Dating

As the first LE inscriptions found in Susa are related to the Susian leader Puzur-Inšušinak, contemporary with Ur-Nammu of Ur and Gudea of Lagaš and consequently dated around 2100 BC in Middle Chronology, LE writing is usually restricted to the end of the 3rd millennium BC. But only 10 Susian texts can be related with certainty to Puzur-Inšušinak (A,

B, C, E, F, G, H, I, P and U). Except for these inscriptions, nothing associates necessarily the 22 other texts to the epoch of that ruler. The texts found in Shahdad and Konar Sandal (S, B', C', D' and E') come from archaeological contexts dated to the second half of the 3rd millennium BC, while the silver vessels with LE inscriptions X, Y, Z and F' and the Indus-related seal with the LE inscription V might be dated by comparison around the end of the 3rd and the beginning of the 2nd millennium BC (Winkelmann 1999: 23).

Table 20.1 List of the 32 Linear Elamite inscriptions.

<i>Text</i>	<i>Material</i>	<i>Description</i>	<i>Found in regular digs?</i>	<i>Discovery place</i>	<i>Bigraphic? (cuneiform or geometric text)</i>	<i>Puzur-Inshushinak's mention (dating) in akkadian?</i>	<i>First publication</i>	<i>Remark</i>
A	stone?	slab (fragmentary statue?)	yes	Susa (?)	yes	direct mention	Scheil 1905 MDP 6	
B	stone?	fragmentary votive boulder?	yes	Susa (?)	yes	indirect mention (joint by André and Salvini 1989)	Scheil 1905 MDP 6	
C	alabaster	fragmentary statue	yes	Susa (?)	yes	indirect mention	Scheil 1908 MDP 10	
D	sandstone	fragmentary votive boulder?	yes	Susa (?)	no	no	Scheil 1908 MDP 10	
E	sandstone	slab (?)	yes	Susa (?)	no	no	Scheil 1908 MDP 10	
F	sandstone	step (?)	yes	Susa (?)	no	direct mention (cf. André and Salvini 1989)	Scheil 1908 MDP 10	
G	sandstone	step (?)	yes	Susa (?)	no	direct mention (cf. André and Salvini 1989)	Scheil 1908 MDP 10	
H	sandstone	step (?)	yes	Susa (?)	no	direct mention (cf. André and Salvini 1989)	Scheil 1908 MDP 10	
I	limestone	female figure statue (goddess?)	yes	Susa (Acropolis, tr. 93)	yes	direct mention	Scheil 1913 MDP 14	
J	clay	cone	yes	Susa (Acropolis)	no	no	Scheil 1935 MDP 26	
K	clay	fragmentary cone	yes	Susa (Acropolis)	no	no	Scheil 1935 MDP 26	
L	clay	fragmentary cone (?)	yes	Susa (Acropolis)	no	no	Scheil 1935 MDP 26	
M	clay	fragmentary lens (?)	yes	Susa (Acropolis)	no	no	Scheil 1935 MDP 26	
N	clay	tablet	yes	Susa (Acropolis)	no	no	Scheil 1935 MDP 26	
O	clay	tablet	yes	Susa (Donjon)	no	no	Scheil 1935 MDP 26	It is not linear Elamite !

P	gypsum	?	yes	Susa (Acropolis, 'chantier 1')	no	no	de Mécquenem 1956	
Q	silver	vase	no	Persepolis (?)	no	no	Hinz 1969	
R	clay	tablet	yes	Susa (Louvre?)	no	no	Hinz 1969	
S	clay	ceramic pot	yes	Shahdad (cemetery A, gr. 30)	no	no	Hinz 1971	
T	limestone	?	yes	Susa (Louvre?)	no	no	André et Salvini 1989	
U	limestone	step (?)	yes	Susa (Louvre?)	no	direct mention (cf. André and Salvini 1989)	André et Salvini 1989	
V	stone?	'Indus' related seal	no	?	no	no	Winkelmann 1999	
W	silver	vase	no	?	no	no	cf. CDLI	
X	silver	vase	no	?	no	no	Mahboubian 2004	
Y	silver	vase	no	?	no	no	Mahboubian 2004	
Z	silver	vase	no	?	no	no	Mahboubian 2004	
A'	metal	vase	no	?	no	no	Phoenix Ancient Art catalog 2007 No. 1 item no. 47	
B'	clay	tablet	yes	Konar Sandal, tr. XV	yes	no	Madjidzadeh 2011	
C'	clay	tablet	yes	Konar Sandal, tr. XV	yes	no	Madjidzadeh 2011	
D'	clay	tablet	no	Konar Sandal, tr. XV (?)	yes	no	Madjidzadeh 2011	
E'	clay	tablet (brick?)	yes	Konar Sandal south	no	no	Madjidzadeh 2011	linear Elamite uncertain
F'	silver	vase	no	?	no	no	Vallat 2011	
G'	gold	seal	no	?	no	no	Christie's 2011, 14/04/2011, lot n° 321	

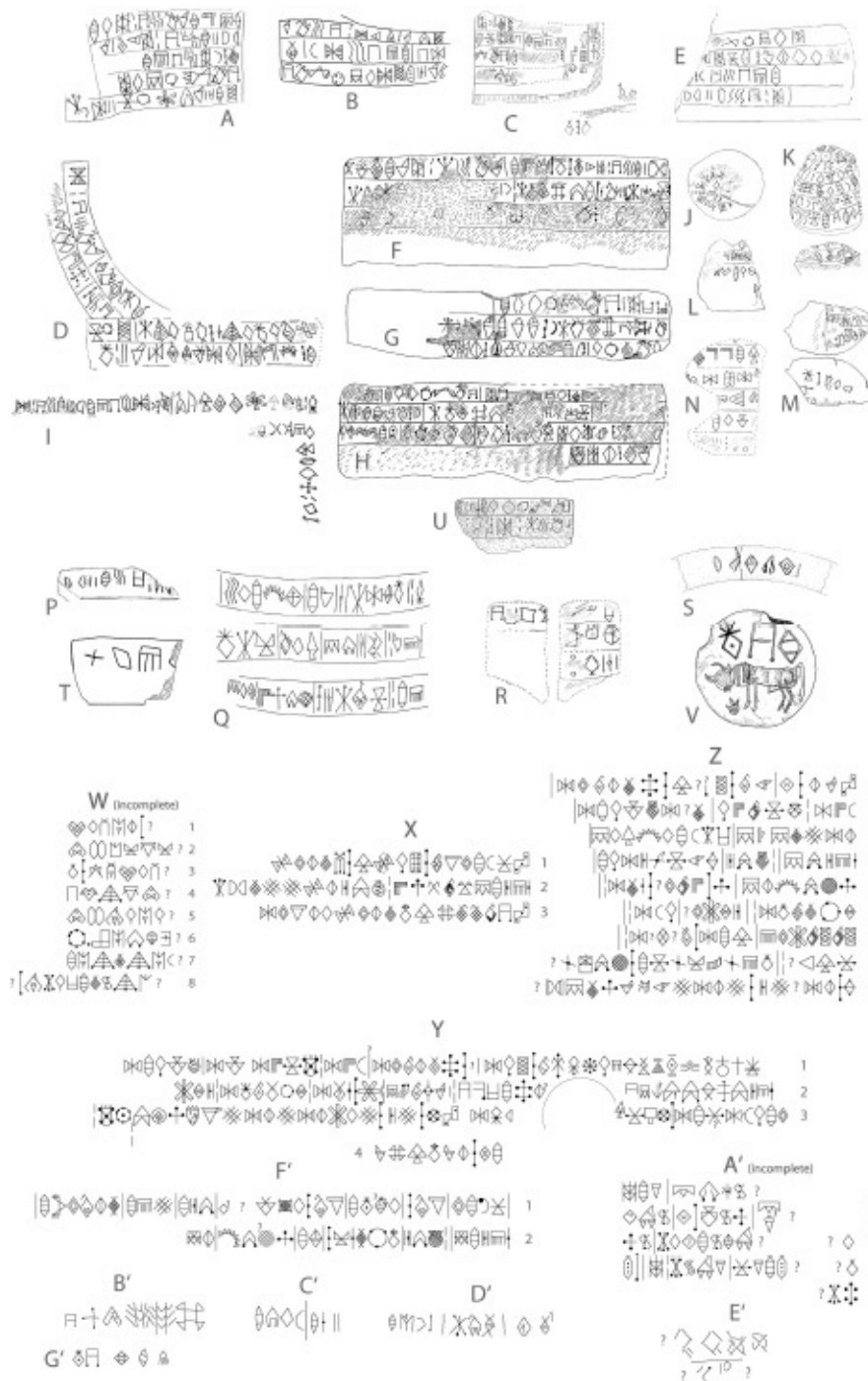


Figure 20.1 The 32 Linear Elamite inscriptions known in 2015 (with the drawings of Meriggi 1971, Pls. 1, 2, 3 and 4 for the inscriptions A to E and I to R, André and Salvini 1989, Figs. 3, 4, 5, 6 and 7 for F, G, H, T and U, Hiebert and Lamberg-Karlovsky 1992, Fig. 4 for S, Winkelmann 1999, Figs. 1 and 2 for V; the other drawings, from W to G', are by the author). They are not represented with the same scale.

created ad hoc in the second half of the 3rd millennium BC, without any known ancestor or heir.

Writing system

Based on the number of signs used, LE writing was probably a mixed system composed of many phonetic value signs (syllabograms) and few logogrammatic value ones (Salvini 1998). While Hinz (1969: 44) accounted for 56 signs + 5 variants and Meriggi (1971: 203–205 and 220; if we exclude the signs of the inscription O) 73 signs, including 19 variants and five logograms, the sign list presented in this chapter ([Figure 20.3](#); updating the list published in Desset 2012: 102) includes 258 signs plus a dividing stroke. The signs are organized according to their shape and not to their hypothetical logogrammatic or phonetic value(s).

As this apparent high number of signs could undermine the supposed general phonetic aspect of the LE writing, it should be recalled that this list includes all the signs and their apparent and non-apparent graphical variants (see below) for chronological or geographical reasons (LE writing was used for at least several centuries and the distance from Susa to Konar Sandal is 1,000 km as the crow flies). Consequently, the real number of LE signs used in a given place at a given time was probably around 100–150 signs. This situation might be roughly compared to the 2nd millennium BC Mycenaean Linear B with its 87 syllabic signs and around 120 logograms.

A vertical stroke was sometimes used to separate words (such as in D, Q, Z, A', C', D' or F') or to separate clauses or sentences (in B, C, F, G, H, I), while in A, E and X, the main semantic elements were distinguished by a carriage return to the next line. Standing apart, Y displays a continuous unbroken sequence of signs. No numeral notation seems to have been recorded in the inscriptions known up to now (even in the more modest clay texts J, K, L, M, N, R, S, B', C', D' and E') since repetitions of the same sign are extremely rare, excluding any additive numeral notation (which was the system then used in the cuneiform and Proto-Elamite writings). LE writing was generally meant to be read from right to left (in rare cases it was, however, written from left to right, such as in the 4th line of Y, one of the rectilinear lines of D as well as probably inscriptions B and J) and from the top to the bottom.

Decipherment

LE writing has usually been considered undeciphered since Vallat's (1986: 345) criticism of previous decipherment attempts such as those by Hinz (1962 and 1969) and Meriggi (1971). These were mainly based on the bigraphical inscriptions of Puzur-Inšušinak found in Susa (cuneiform inscriptions written in Akkadian/LE inscriptions written in an unknown language).

Among them, the complete LE text A is exceptional since it is written on the same stone slab as a complete cuneiform Akkadian inscription recording notably the names of Inšušinak, Puzur-Inšušinak, Susa and Simb/pišhuk (as well as the theonyms INANA/Ištar, Narude, and Nergal), supposed to appear also in the LE text in a close phonetical form, whatever the language recorded might have been (Scheil 1905a: 8–10; Meriggi 1971: 186; Sollberger and Kupper 1971: 124–125).

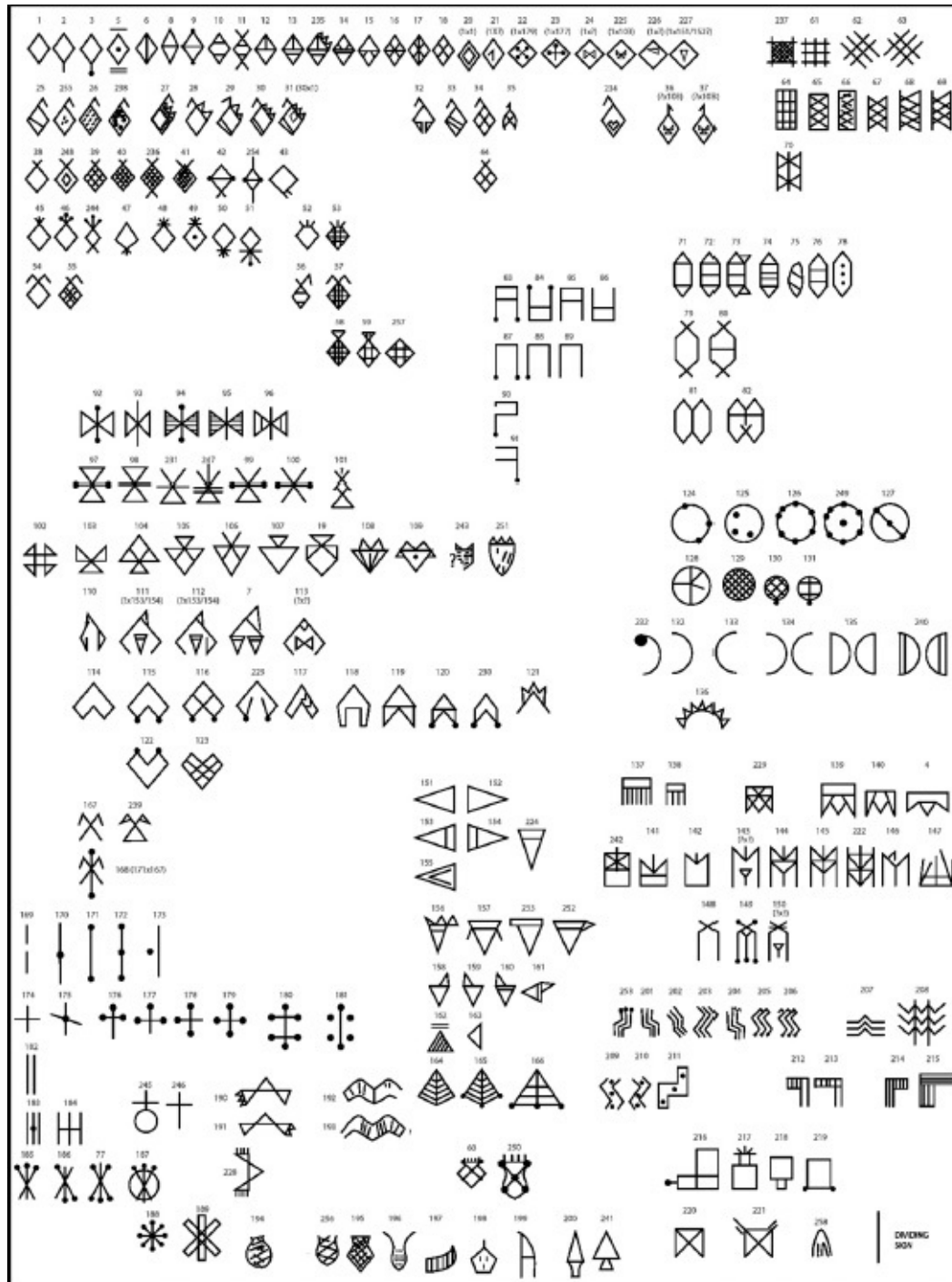


Figure 20.3 LE signs list.

Table 20.2 Distribution of the Linear Elamite signs in the 32 inscriptions

1: A, B, D, E, F, G, H, I, J, K, L, M, N, Q, R, T, U, X, Y, A', C', F'	2: A, D, G, H, L, U, W	3: X, Y, Z
4: A'	5: Y	6: E, G, H, I, K, W, X, Y, Z, F'
7: A'	8: A	9: Z
10: V	11: D'	12: D, S
13: D, F, G, H, Q, A', F'	14: Y, Z	15: H
16: H	17: F	18: H, Y, Z
19: A'	20: D, I, K, Q, S, X, Y, Z, F'	21: D'
22: Y	23: Q	24: Z
25: Y	26: Z	27: Z
28: A, B, G, H	29: D, F, G, H, U	30: Q
31: C	32: D'	33: D, I
34: F, J	35: B, I	36: Q, Y, Z
37: D	38: C	39: G, W, X, Z
40: A, C, Z	41: Z	42: Y
43: E'	44: I	45: W, A'
46: X, Y, F'	47: R	48: D, F, H, Q, Z
49: V, F', G'	50: I, Q, Y	51: Y
52: G, M	53: K	54: D
55: F, X, Z	56: D'	57: B
58: K	59: K	60: Z
61: K	62: X	63: Y, Z, F'
64: X	65: Y	66: Z
67: B	68: D, K	69: A
70: A, C, E, F, G, H, J	71: Q, Z	72: A, B, C, E, F, G, H, I, J, K, N, P, Q, U, W, X, Y, Z, A', F'
73: K	74: F, H	75: S, C', D', G'
76: K, N, W, Y, F'	77: A'	78: G, H, A'
79: D, K	80: F, G, L	81: W
82: N	83: A, B, C, D, F, G, H, I, K, P, R, U, V, X, B', G'	84: G, Z
85: Y	86: W, Y	87: A, C, I
88: B	89: C, E, W	90: K
91: Y	92: A, C, D, H, M, N, Q, U	93: Z
94: B	95: B, D, I	96: X, Y, Z
97: C, D, F, H, K, Q, Y, Z	98: A, E	99: M, Y, Z, A'
100: Y	101: Y	102: F, G, H, X, Y, B'
103: J, Q, W, Z, F'	104: H, I, N, X, Y, Z	105: G, H, Y, Z
106: D, F, F'	107: N	108: K
109: W	110: S	111: W
112: W	113: W	114: I
115: A, B, D, F, G, H, Q, W	116: N	117: B'
118: C'	119: X	120: Y, Z
121: W	122: L	123: W
124: A, D, E, G, H, U, Y, Z, F'	125: B, F	126: W
127: L	128: R	129: Z

130: Q	131: W	132: A, C, E, G, H, I, K, D'
133: B, E, G, J, U, X, Y, C'	134: I, M	135: A, E, F, I, P, X
136: D, F, Q, Z, F'	137: A, B, C, E, Q, Z, F'	138: I, T, X, Y
139: A, B, E, X, Y, Z	140: K, Q	141: F, H
142: W	143: W	144: W
145: W	146: D'	147: K
148: W	149: X	150: W
151: J	152: H	153: A, B, Y
154: F	155: N	156: K
157: W	158: A, B, C, D, E, G, H	159: Q
160: Y, Z	161: Z	162: Y
163: Y	164: D	165: D
166: W	167: X	168: Y
169: A, B, D, E, F, I, Q, U,	170: D, E, G, Q, X, Y, Z, C, F	171: F, I, M, W, Y, Z, A', D' W, X, Y, Z, A', F'
172: A, B, C, D, E, F, G, H, I, J, K, Q, U, W, X, Y, Z, F'	173: J	174: T
175: Z	176: Q, Z	177: X, F'
178: A, B'	179: I, Y	180: D, Y, Z
181: K, A'	182: A, D, E, K, M, P, C'	183: A, B, E, H, Q, R, X, Y, Z, F'
184: K	185: A, D, E, G, H, J, Q, U, W, X, Z	186: D'
187: H	188: Y	189: A, D, E, H, I, M, Y, Z
190: A, C, U	191: B, H	192: G
193: H	194: X	195: Z, F'
196: D	197: Z	198: G
199: I	200: Q	201: A, D, E, F, I, K, P, U, A'
202: B, F, H, I	203: C, E, Q	204: D
205: K	206: K, M	207: Y
208: B'	209: W, A'	210: I, M, Q
211: X, Y, Z	212: A, D	213: N
214: Q, Y, Z	215: X	216: W
217: D	218: Y	219: K
220: E'	221: E'	222: A'
223: A'	224: A'	225: A'
226: A'	227: A'	228: F'
229: F'	230: F'	231: X, F'
232: F'	233: X, F'	234: F'
235: F'	236: F'	237: F'
238: X	239: X	240: Z
241: Z	242: Z	243: Z
244: Y	245: Y	246: Y
247: Y	248: Y	249: Y
250: Y	251: Y	252: Y
253: Y	254: Y	255: Y
256: Y	257: G'	258: G'
Dividing sign: B, C, D, E, F, G, H, I, J, Q, S, U, Y, Z, A', C', D', F'		

Thanks to LE text A, Bork (1905) could identify in 1905 the signs probably recording the sounds *šu* (signs 201–203), *ši* (signs 83–86), *na* (sign 169) and *a/ik* (sign 70), the sequence sometimes preceded by two signs interpreted by Frank (1912) in 1912 as a divine determinative (sign 158) and the sound *in* (signs 28–30), the whole sequence corresponding to the theonym ^d*In-šu-ši-na-a/ik*. Meriggi (1971: 207) noticed that sign 185 could be used sometimes in the place of signs 83–86 (inscriptions F, H and U) and attributed to it the phonetic value (u)š, implying that the name of the god of Susa could be spelled either ^dInšušinak or ^dInšušnak (Figure 20.4). Such an alternation was also observed between the sign 70 and the signs 94–95 (Figure 20.5), which are probably graphical variants of the same sign (since they exclude each other) and not two different signs. This would prove that, even in the chancellery of Puzur-Inšušinak in Susa, two variants were used for the same sign.

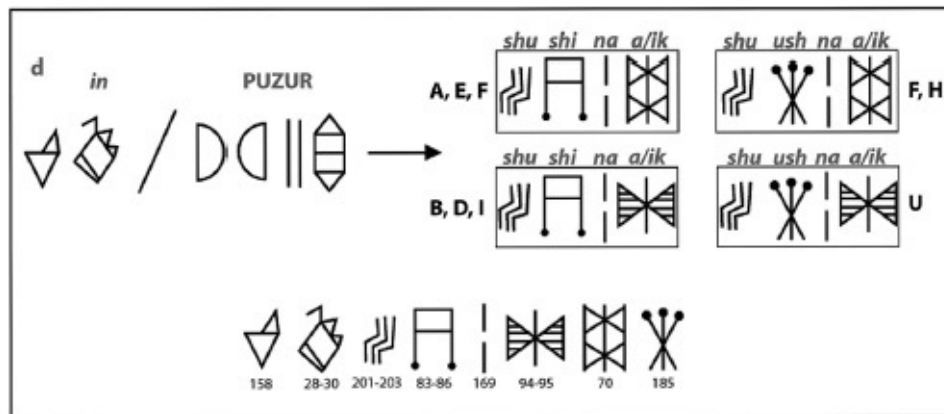


Figure 20.4 Different writings of ^dIn/PUZUR šušinak and texts where they are displayed.

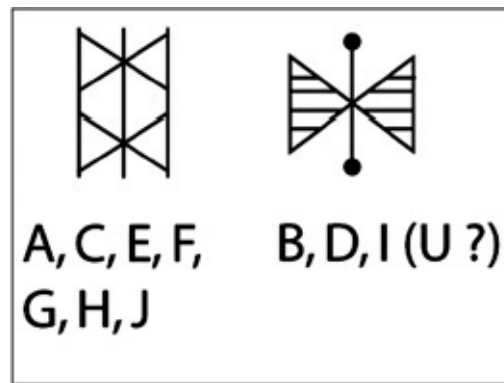
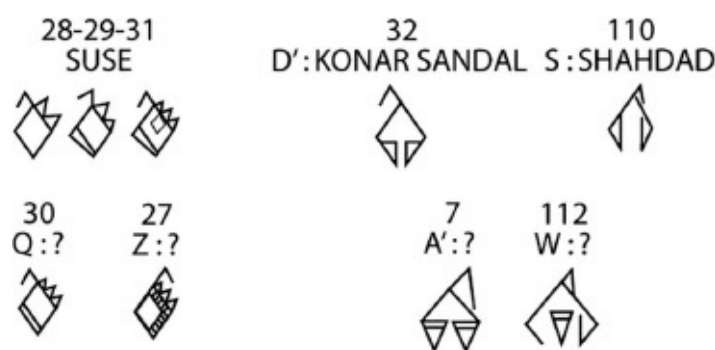


Figure 20.5 LE signs 70 (on the left) and 94-95 (on the right) and texts where they are displayed.

Thanks to the theonym Inšušinak, we can gain a better understanding of this graphical variation phenomenon. In inscription A', this theonym was probably also recorded. Comparing the way it was written here with its Susian counterpart, it notably reveals graphical variation in the shape of the sign recording the sound *in* (Figure 20.6). Once this variation is understood, it seems that a Susian/Western variant of this sign may be distinguished from a Kermanian/Eastern one, helping to estimate roughly the geographical origin of the unprovenienced inscriptions. As the signs probably used to write the sound *in* in the inscriptions Q and Z are closer to the Susian variants than to the Kermanian ones, it can be hypothesized that these inscriptions were probably written in south-western Iran; as the signs probably used to write the sound *in* in the inscriptions W and A' are closer to the Kermanian variants than to the Susian ones, it can be hypothesized that these inscriptions were probably written in south-eastern Iran (Fig 20.7). This regional variation phenomenon likely applies to many other apparently different signs, reducing consequently the number of signs (258) identified so far.



[Figure 20.6 LE inscriptions A' and graphical variation of the LE sign in between Susian texts and inscription A'.](#)



[Figure 20.7 Graphical variants of the LE sign in.](#)

With the few quite certain identifications mentioned above, the two main decipherment attempts by Hinz and Meriggi were based on the hypothesis that the LE inscriptions were written in the Elamite language,³ the first author considering Puzur-Inšušinak texts as written in the 1st person singular (like Vallat 1986: 342), the second in the 3rd person singular. Hinz (1962: 10–16; 1969: 26, 29–43; 1971) even proposed translations for the LE texts A, B, C, D, E, F, G, H, I, J, K, P, Q and S, but his work is unfortunately flawed by many mistakes and imprecisions (Vallat 1986: 342–345; 2011: 188, Stève 2000: 76; Desset 2012: 107–108, n. 24). Considering the important geographical extension of this writing system, it is furthermore possible that the language(s) recorded in the Kermanian (Shahdad and Konar Sandal) inscriptions differed from the one written in the Susian texts (without saying that it was perhaps an unknown or unknowable language).

The Puzur-Inšušinak LE inscriptions still remain our best track towards the decipherment of this writing system.⁴ The 10 inscriptions which can be attributed to this ruler nevertheless constitute only three independent texts (inscription P is too fragmentary and is of no use here) consisting of several sign sequences sometimes included, sometimes omitted ([Figure 20.8](#)):

- A/B/C/E

- F/G/H (/U?)
- I

LE inscription A is written on the same stone slab as a cuneiform Akkadian inscription where Puzur-Inšušinak is said to be ‘*ensi* of Susa, KIŠ-NÍTA of the land of NIM, son of Simpišhuk’ (Scheil 1905a: 8–10, Meriggi 1971: 186 and Sollberger and Kupper 1971: 124–125) while LE inscriptions F/G/H (and maybe U), according to the hypothesis of André and Salvini (1989: 63, 69), were probably written on a monument also displaying cuneiform Akkadian inscriptions stating that Puzur-Inšušinak was ‘*danum, lugal* of Awan, son of Simpišhuk’ (Scheil 1908: 9–11; Sollberger and Kupper 1971: 125; André and Salvini 1989: 65–67). LE inscription I was written on the statue of a goddess bearing also a cuneiform Akkadian inscription declaring that Puzur-Inšušinak was only ‘*ensi* of Susa’ (Scheil 1913: 17–19).⁵

Although LE inscriptions are probably not mere translations of the cuneiform Akkadian ones, the decipherment attempts of Hinz and Meriggi started with the hypothesis that the title used in the cuneiform Akkadian and in the LE texts were similar:

- A/B/C/E: *ensi* of Susa, KIŠ-NÍTA of the land of NIM, son of Simpišhuk
- F/G/H (/U?): *danum, lugal* of Awan, son of Simpišhuk
- I: *ensi* of Susa

Figure 20.9 displays the synthesized version of the LE texts A/B/C/E, F/G/H and I. Six specific sign sequences can be identified.

The sequence 1 is the theonym Inšušinak (see above).



Figure 20.8 The Susian EL inscriptions A/B/C/E and F/G/H (and U?) and their semantic segments.

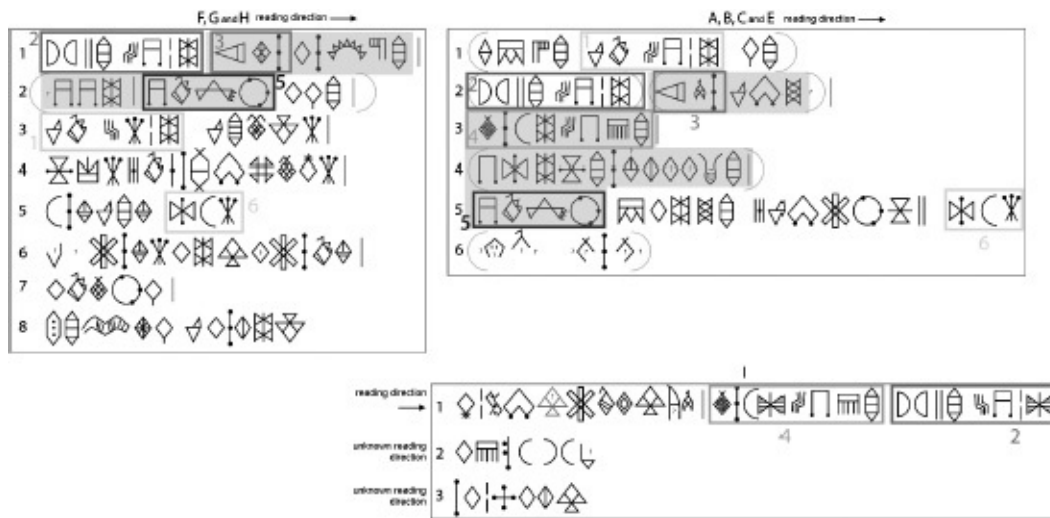


Figure 20.9 Susian EL texts A/B/C/E, F/G/H and I (the parentheses show the sequences which can be omitted) and the 6 specific signs sequences (Puzur-Inšušinak titles are shown in grey).

The sequence 2 displays the signs writing the name of the ruler, Puzur-Inšušinak. This name is problematic since its first part is written in the cuneiform text with the sign PUZUR₄, which might be read *puzrum* in Akkadian (meaning ‘secret’, ‘shelter’, ‘protection’) while the LE texts use three signs with very likely phonetic values. According to Zadok (1984: 25 and 55–56), PUZUR₄ could be read in Akkadian *Puzur/Puzru*, maybe written *pu-zu-ur/ru* in the LE version. If an Elamite reading of the sign PUZUR₄ is chosen, then the strict Elamite equivalent *kuk/kuku* could not correspond to the three different signs in the EL version and only the form *kute-ir* (verbal base + 3rd singular person nominal suffix; Grilott 1987: 35; 2008: 80), proposed by Meriggi (1971: 206) and well attested in the onomastics,⁶ could then be accepted. Consequently, if the reading of the sign PUZUR₄, either Akkadian (*puzur/puzru*) or Elamite (*kute/ir*), is decomposed into three syllables, *pu/ku*, *zu/uz/te/ti*, and *ur/ru/er/ir*, it seems that the final syllable very probably recorded the sound *r*, which is consequently the probable phonetic value of the LE sign 72.

The sequence 5 only appears in the texts A/B/C/E and F/G/H. As the phonetic value of the first two signs is known, *ši-in*, it has been proposed to read in this sequence the name of the father of Puzur-Inšušinak, Simpišhuk, which would make this sequence the end of the title of Puzur-Inšušinak (son of Simpišhuk; the probable complete title of Puzur-Inšušinak is represented in grey in Figure 20.9).⁷ The identification of this sequence with the name of Simpišhuk is nevertheless problematic. According to Hinz, these four signs should be read *ši-in-pi-hi* to which should be added the next six signs in text A/B/C/E to be read *-iš-hu-ik ša-ki-ri* (*Šinpihišhuk šak-ri*, ‘son of Šinpihišhuk’).⁸ According to Meriggi, these four signs were to be read *ši-in-bi-* to which were to be added the next five signs in text A/B/C/E to be read *iš-hu-ik ŠAK-ri* (*Šinbi’iškuk ŠAK-ri*).⁹ Finally, Vallat proposed to read these four signs *ši-in-piš-hu*, to which should be added the next three signs in text A/B/C/E to be read *-uk ŠAK-ik*

(*Šinpišhuk ŠAK-ik*) (Vallat 1986: 343). These are problematic hypotheses since none of them take into account the text F/G/H/U. If we do so, the name of the father of Puzur-Inšušinak was maybe written only with the four signs of the sequence 5 (*ši-in-piš-huk*) and the filiation (son of) expressed after differently in A/B/C/E and in F/G/H/U.

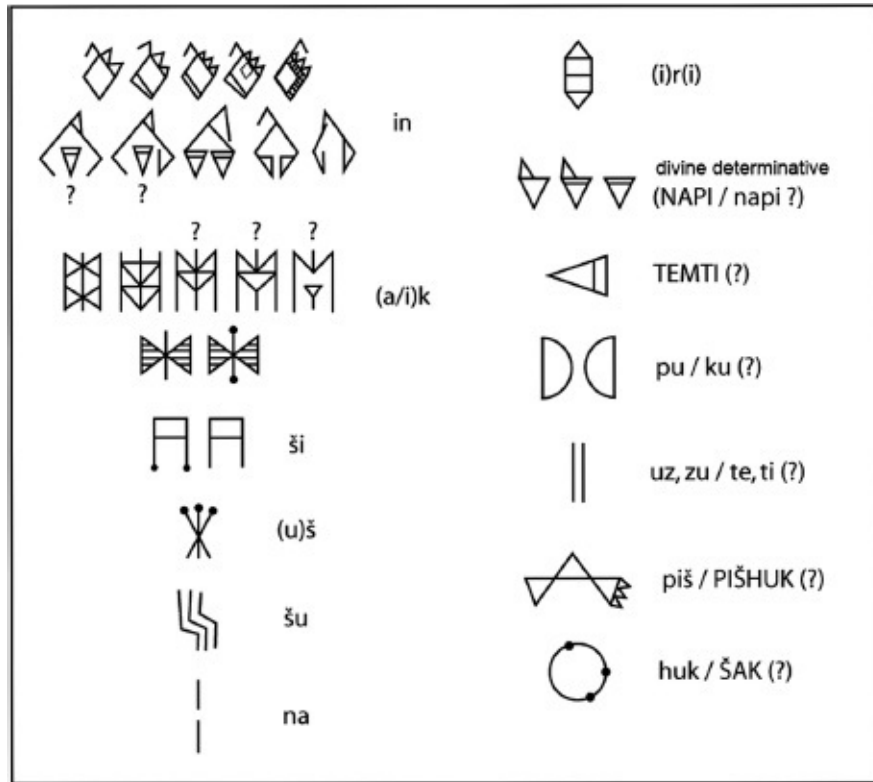
Whatever the correct hypothesis might be, the filiation of Puzur-Inšušinak probably closed his title, like in his cuneiform Akkadian inscriptions. Consequently, sequences 3 and 4 were included in the title of Puzur-Inšušinak (in grey in Figure 20.9). Sequence 4 was only used in texts AB/C/E and I. These LE inscriptions are related to cuneiform Akkadian texts where Puzur-Inšušinak is notably said to be ‘*ensi* of Susa’ (see above). The sequence 4, composed of eight signs, probably reflects this title where the toponym Susa should consequently appear. Hinz and Meriggi, respectively, interpreted these 8 signs *hal me-ni-ik šu-si-im-ki* (because Hinz thought Puzur-Inšušinak’s inscriptions were written in Elamite language with the 1st person singular) and *hal me-ni-ik šu-še-en-ri* (according to Meriggi, Puzur-Inšušinak’s inscriptions were written in the Elamite language with the 3rd person singular). Since the 5th sign of this sequence is the sign meaning *šu*, this is probably the 1st sign of the toponym which was spelled phonetically *Šušim*/*Šušim* in the Akkadian period and *Šušum* in the Ur III period (while the logogrammatic notation MÜŠ.EREN was also used at that time, as for example in the cuneiform Akkadian inscriptions of Puzur-Inšušinak).¹⁰ While the 5th, 6th and 7th signs of the sequence 4 could be read *šu-ši-im*, the first four signs of this sequence probably wrote the title corresponding to *ensi* in the Akkadian inscriptions.

The signs sequence 3 written just after the name of Puzur-Inšušinak in inscriptions A/B/C/E and F/G/H is probably a title (this sign sequence is also written in inscription J). As the title used in cuneiform Akkadian texts related to LE text A/B/C/E (‘*ensi* of Susa, KIŠ-NÍTA of the land of NIM’) and in the cuneiform Akkadian texts related to LE text F/G/H (‘*danum*, *lugal* of Awan’) are different, and as this sequence is similar in both LE texts A/B/C/E and F/G/H, this is proof that the LE texts are not a mere reflection of the cuneiform Akkadian texts. Both Hinz and Meriggi interpreted this three sign sequence as SUNKI *hal-me* (*ki/ri*), with a logogrammatic meaning (SUNKI ‘king’) for the sign 153–154. If the hypothesis that the Elamite language is behind the LE inscriptions of Puzur-Inšušinak is correct, it must be recalled that the title *sunki* only appeared in the Medio-Elamite period while the few Elamite titles known for the simaškan kings and the sukkalmahs describe the first as *temti* and the second as *likawe/me rišaki* and *menik Hatamtik*.¹¹ From a chronological point of view, the title *temti* seems therefore to be the closest for Puzur-Inšušinak (if his LE inscriptions were written in Elamite), written perhaps phonetically with the three signs of the sequence 3 (*te-em-ti*?) or only with the first of them, in a logogrammatic way (sign 153–154; TEMTI?).

The three-sign sequence 6 probably has a verbal meaning since it is notably written at the end of LE inscription A and probably at the end of a clause in text F/G/H. As the last sign of this sequence (sign 185) was supposed to have the phonetic value (*u*)š (see above), it should be

recalled here that the 3rd person singular of the verbal conjugation in Elamite is written with -š.¹²

Based on the Puzur-Inšušinak LE inscriptions, Hinz and Meriggi could propose logogrammatic and phonetic values for several signs (Hinz 1969: 44 and Meriggi 1971: 193–203, 219–220). However, only seven phonetic values, *in*, *(a/i)k*, *ši*, *(u)š*, *šu*, *na* and *(i)r* and one logogrammatic value (the divine determinative) currently seem acceptable, while the phonetic values *pu/ku* (?), *uz/zu/te/ti* (?), and the logogrammatic value TEMTI remain plausible (see [Figure 20.10](#), previously published in Desset 2012: 127, Figure 46).



[Figure 20.10](#) List of the accepted values for LE signs (5 identifications in the right column are uncertain).

Conclusion

Created several centuries after the disappearance of the Proto-Elamite tablets, LE writing was until recently considered as a phenomenon mainly restricted to Susa in general and Puzur-Inšušinak's epoch (ca. 2100 BC) in particular. The discoveries, particularly in the Kerman province (Konar Sandal and Shahdad), show that this writing system was probably created in the second half of the 3rd millennium BC in southern Iran (along with the newly discovered geometric writing system), independently from the cuneiform writing system which would be only imported into south-western Iran from ca. 2200 BC with the Akkadian annexation of Susa (Legrain 1913). While the urban occupation completely collapsed in south-eastern Iran in

the beginning of the 2nd millennium BC, the cuneiform writing system probably played an important role at that time in the abandonment of the LE system in south-western Iran. Reducing the range of possibilities, it established itself as the only conceivable system, initiating the long series of western imported writing systems used on the Iranian plateau (cuneiform system/Aramaic derived alphabet/modified Arabic alphabet/modified Latin alphabet).

Although our knowledge is still very restricted, it must be admitted that the LE writing system was probably limited to a small community of users (at least much smaller than the cuneiform one) and preferentially used for royal inscriptions on stone monuments or silver vessels, while a few clay (and more daily) documents were also found in Susa, Shahdad and Konar Sandal. We still cannot understand the reasons why a leader such as Puzur-Inšušinak felt the need to write, only in some of his inscriptions, LE texts alongside cuneiform ones. Also remaining elusive is the relation between LE and geometric writings in the Halil Rud valley, where LE signs could have been used to write only anthroponyms, as a kind of signature (see Desset 2014: 89–90). Understanding the bigraphical context of the use of LE writing will be of no help in deciphering it, but it could enable us to apprehend the symbolic meaning granted to these signs, referring perhaps to a specific identity that needed to be displayed.¹³

Notes

- ¹ Inscription O is not written with LE signs. See Dahl (2013: 257) for the hypothetical discovery context of the LE texts in Susa.
- ² LE texts B', C' and D' were written on baked clay tablets also written with another graphic system (see Madjidzadeh 2011 and Desset 2014). The exact nature of text E' is still uncertain.
- ³ Most of the scholars proposed this hypothesis, except Salvini (1998) who, carefully, considers this point as uncertain. In Susa, LE inscriptions might also have been used to record the Akkadian language.
- ⁴ Another track is represented by several inscribed silver vessels, including X, Y, Z, F' and other vessels from the Mahboubian collection I should publish soon.
- ⁵ Hinz (1962: 15–16) read the theonym Narunte in the LE inscription I. This point is, however, very far from certain and this statue should consequently not be attributed to the goddess Narunte.
- ⁶ Contrary to the form *kute/ik* (passive perfective participle) advocated by Hinz (1962: 8 and Hinz and Koch 1987: 547).
- ⁷ Interestingly, this sequence is absent in the LE inscription I, which is written on the same support as a cuneiform Akkadian inscription of Puzur-Inšušinak where the ruler does not qualify himself as 'son of Simpišhuk'.
- ⁸ But according to this interpretation, Hinz (1969: 37) could not read 'Simpišhuk' in the inscription F/G/H, which invalidates his work.
- ⁹ Meriggi (1971: 209) recognized that this reading was problematic for the case of the text F/G/H.
- ¹⁰ For the toponym Susa, see Edzard, Farber and Sollberger 1977: 154–155; Edzard and Farber 1974: 175–176 and 187–191;

Groneberg 1980: 230; Vallat 1993: 265–271; and Krebernik 2006: 67–72.

- [11](#) Kindatu is *temti* (Mahboubian 2004: 46–47), Ebarat (II) is *temti* (Mahboubian 2004: 48–49), Sirukduh or Siwe-palar-hupak is *lika*[w/me *rišaki*], *meni*[k *Hatamtik*] and *ruhu-š*[ak of ?] (Farber 1974, while Inšušinak is *temti* [...]), Siwe-palar-hupak is *likaw/me rišaki*, *menik Hatamtik* and *ruhu-šak* of Šilhaha (Rutten 1949 and Mahboubian 2004: 44–45; Gian Pietro Basello’s (pers. comm.) reading of Mahboubian 2004: 44–45 made clear that Siwe-palar-hupak is not the *ruhu-šak* of Sirukduh; while Inšušinak is said to be *temti alim eliri* and *temti rišari*, ‘*temti* of the Upper City’ and ‘great *temti*’, and Napiriša *temti* and ‘leader of the army’ [?]). It seems that the title *temti*, used for men at the time of Kindatu and Ebarat II, was only used for gods at the time of the sukkalmahs.
- [12](#) Meriggi (1971: 207–209) interpreted this three-sign sequence as *du-ni-(u)š* / *duniš*, ‘he/she gave’ in Elamite.
- [13](#) The information available through Puzur-Inšušinak’s inscriptions was presented here. As previously stated, a coherent corpus of silver vessels recently discovered in the Mahboubian collection in London and soon to be published might constitute another track and could play an important role in the decipherment of the LE writing.

References

- André, B. and Salvini, M. 1989. Réflexions sur Puzur-Inshushinak. *Iranica Antiqua* 24: 53–72.
- Bork, F. 1905. Zur protoelamischen Schrift. *Orientalistische Litteratur-Zeitung* 8: 323–330.
- Dahl, J.L. 2009. Early Writing in Iran, a Reappraisal. *Iran* 47: 23–31.
- . 2013. Early writing in Iran. In: Potts, D.T. (ed.) *The Oxford handbook of Ancient Iran*. Oxford: Oxford University Press, 233–262.
- Desset, F. 2012. *Premières écritures iraniennes. Les systèmes proto-élamite et élamite linéaire*, Series Minor 76. Napoli: Dipartimento di Studi Asiatici, Università degli Studi di Napoli “L’Orientale”.
- . 2014. A New Writing System Discovered in 3rd Millennium BCE Iran: The Konar Sandal ‘geometric’ Tablets. *Iranica Antiqua* 49: 83–109.
- Edzard, D.O. and Farber, G. 1974. *Die Orts- und Gewässernamen der Zeit der 3. Dynastie von Ur*, Répertoire géographique des textes cunéiformes 2. Wiesbaden: Dr. L. Reichert.
- Edzard, D.O., Farber, G. and Sollberger, E. 1977. *Die Orts- und Gewässernamen der präargonischen und sargonischen Zeit*, Répertoire géographique des textes cunéiformes 1. Wiesbaden: Dr. L. Reichert.
- Farber, W. 1974. Eine elamische Inschrift aus der 1. Hälfte des 2. Jahrtausends. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 64: 74–86.
- Frank, C. 1912. *Zur Entzifferung der altelamischen Inschriften*. Berlin: Verlag der Königl. Akademie der Wissenschaften.
- Gelb, I.J. 1963. *A study of writing*, revised edition. Chicago: The University of Chicago Press.
- Glassner, J.-J. 2002a. Dilmun et Magan: la place de l’écriture. In: van Lerberghe, K. and Voet, G. (eds.) *Languages and cultures in contact, at the crossroads of civilizations in the Syro-mesopotamian realm, proceedings of the 42th RAI*, Orientalia Lovaniensia analecta 96. Leuven: Peeters, 133–144.
- . 2002b. Dilmun et Magan: le peuplement, l’organisation politique, la question des Amorrites et la place de l’écriture. Point de vue de l’assyriologue. In: Cleuziou, S., Tosi, M. and Zarins, J. (eds.) *Essays on the Late Prehistory of the Arabian*

- Peninsula*. Roma: Istituto italiano per l'Africa e l'Oriente, 337–381.
- Grillot, F. 1987. *Éléments de grammaire élamite*, Synthèse 29. Paris: Editions Recherche sur les Civilisations.
- . 2008. *L'élamite, éléments de grammaire*. Paris: Geuthner.
- Groneberg, B. 1980. *Die Orts- und Gewässernamen der altbabylonischen Zeit*, Répertoire géographique des textes cunéiformes 3. Wiesbaden: Dr. L. Reichert.
- Hiebert, F.T. and Lamberg-Karlovsky, C.C. 1992. Central Asia and the Indo-Iranian Borderlands. *Iran* 30: 1–15.
- Hinz W. 1962. Zur Entzifferung der elamischen Strichschrift. *Iranica Antiqua* 2: 1–21.
- . 1969. Eine neugefundene altelamische Silbervase. In: idem, *Altiranische Funde und Forschungen*. Berlin: Walter de Gruyter, 11–44.
- . 1971. Eine altelamische Tonkrug-Auschrift vom Rande der Lut. *Archäologische Mitteilungen aus Iran* 4: 21–24.
- Hinz, W. and Koch, H. 1987. *Elamisches Wörterbuch*, Archäologische Mitteilungen aus Iran, Ergänzungsband 17. Berlin: D. Reimer.
- Joshi, J.P. and Parpola, A. 1987. *Corpus of Indus seals and inscriptions. Vol. I: collections in India*. Helsinki: Suomalainen Tiedeakatemia.
- Klochkov, I.S. 1998. Signs on a potsherd from Gonur (on the question of the script used in Margiana). *Ancient Civilizations from Scythia to Siberia* 5/2: 165–175.
- Krebernik, M. 2006. Philologische Aspekte elamisch-mesopotamischer Beziehungen im Überblick. In: *Babel und Bibel* 3, Orientalia et classica 14. Winona Lake, IN: Eisenbrauns for the Russian State University, 59–99.
- Legrain, L. 1913. Tablettes de comptabilité, etc. de l'époque de la dynastie d'Agadè. In: Scheil 1913: 62–131.
- Madjidzadeh, Y. 2011. Jiroft Tablets and the Origin of the Linear Elamite Writing System. In: Osada, T. and Witzel, M. (eds.) *Cultural Relations Between the Indus and the Iranian Plateau du-ring the Third Millennium BCE. Indus Project, Institute for Humanities and Nature. June 7–8, 2008*, Harvard Oriental Series, Opera Minora 7. Cambridge, MA: Department of Sanskrit and Indian Studies, Harvard University.
- Mahboubian, H. 2004. *Elam, art and civilization of ancient Iran, 3000–2000 BC*. Salisbury: BAS Printer.
- Mecquenem, R. de 1956. Notes protoélamites. *Revue d'assyriologie et d'archéologie orientale* 50: 200–204.
- Meriggi, P. 1971. *La scrittura proto-elamica, parte 1. La scrittura e il contenuto dei testi*. Roma: Accademia Nazionale dei Lincei.
- Moqaddam, A. 2009. Ancient geometry and 'Proto-iranian' scripts south Konar Sandal mound inscriptions, Jiroft. In: Allison, C., Joisten-Pruschke, A. and Wendtland, A. (eds.) *From Daena to Din, Religion, Kultur und Sprache in der iranischen Welt. Festchrift für Philip Kreyenbroek zum 60. Geburtstag*, Wiesbaden: Harrassowitz Verlag, 53–103.
- Rutten, M. 1949. Deux fragments de tablette provenant de Suse au nom de Šiwepalarhuhpak. In: Mecquenem, R. de, *Épigraphie proto-élamite* and Rutten, M., *Archéologie susienne*, Mémoires de la Mission Archéologique en Iran 31. Paris: Presses Universitaires de France, 151–167.
- Salvini, M. 1998. Elam, iv. Linear Elamite. In: Yarshater, E. (ed.) *Encyclopaedia Iranica* 8: 330–332.
- Scheil, V. 1905a. *Textes élamites-sémitiques. Troisième série*, Délégation en Perse, Mémoires 6. Paris: Ernest Leroux, éditeur.
- . 1905b. Documents archaïques en écriture proto-élamite. In: Scheil 1905a: 57–128.
- . 1908. *Textes élamites-sémitiques. Quatrième série*, Délégation en Perse, Mémoires 10. Paris: Ernest Leroux, éditeur.

- . 1913. *Textes élamites-sémitiques. Cinquième série*, Mémoires de la Mission archéologique de Susiane 14. Paris: Ernest Leroux, éditeur.
- . 1935. *Textes de comptabilité proto-élamites. Troisième série*, Mémoires de la Mission Archéologique de Perse 26. Paris: Librairie Ernest Leroux.
- Sollberger, E. and Kupper, J.-R. 1971. Inscriptions royales sumériennes et akkadiennes. Paris: Les Éditions du Cerf.
- Stève, M.-J. 2000. Le syllabaire proto-élamite linéaire. In: Viers, R. (ed.) *Des signes pictographiques à l'alphabet*, Paris: Karthala – Nice: Association Alphabets, 73–86.
- Vallat, F. 1986. The Most Ancient Scripts of Iran: The Current Situation. *World Archaeology* 17/3: 335–347.
- . 1993. *Les noms géographiques des sources suso-élamites*, Répertoire géographique des textes cunéiformes 11. Wiesbaden: Dr. L. Reichert.
- . 2011. Textes historiques élamites et achéménides. In: George, A.R. (ed.) *Cuneiform Royal Inscriptions and related texts in the Schøyen Collection*, Cornell University Studies in Assyriology and Sumerology (CUSAS) 17. Bethesda: CDL Press, MD, 187–192.
- Winkelman, S. 1999. Ein Stempelsiegel mit alt-elamischer Strichschrift. *Archäologische Mitteilungen aus Iran und Turan* 31: 23–32.
- Zadok, R. 1984. *The elamite onomasticon*, Supplemento agli Annali 40. Napoli: Istituto Universitario Orientale.

CHAPTER TWENTY-ONE

The Elamite Language



*Jan Tavernier*¹

Introduction

Elamite is a language that was spoken in the southwest of Iran between at least the 23rd and the 4th century BCE; the period in which it is attested epigraphically. The Elamite language is completely isolated and partly because of this status is not yet fully known. There may be a distant link to the Dravidian languages (cf. McAlpin 1981) in the sense that a Proto-Elamo-Dravidian language which split up into a Dravidian and Elamite family in the 5th millennium BCE can possibly be reconstructed, but unfortunately this does not help modern scholars in their study of the still not completely understood Elamite language.

The name Elam itself is not Elamite, but on the contrary was designed by the Mesopotamian scribes. The first name they gave to the Elamite territory was Sumerian NIM “high (land)”, of which the Akkadian equivalent was Elam(a)tum. This name was adopted in the Bible under the form עֵלָם (e.g. in *Genesis* 10:22 and 14:1; *Isaiah* 11:11, 21:2, 22:6; *Jeremiah* 25:25 and 49:35–39), and from there it reached modern scholarship through Greek and Latin traditions.

The Elamites themselves called their land Ha(l)tamti, a name attested for the first time in an inscription of the Old Elamite king Siwe-palar-hupak (Ha-da-am-[ti-ik] in EKI 3:5; first half of the 18th century BCE). Despite the fact that its etymology is under debate, a plausible idea is that it is composed of the Elamite words *hal* “land” and *temti* “Lord”, that is, “land of the Lord”.

It should be noted that the grammatical description in this chapter is based on the Elamite grammars already published and listed in Chapter 2.

Previous research on the Elamite language

The first study of Elamite linguistics focused on the Elamite cuneiform writing system as attested in the Persepolis inscriptions. It appeared in 1844 (Westergaard 1844) when only the

beginning of the great Bisotun rock inscription from Darius I (521–486 BCE), the other main source for the decipherment of the Old Persian, Babylonian and Elamite cuneiform writing systems, was known to the scientific world.

The study of this latter inscription by the well-known British researcher Henry Creswicke Rawlinson constitutes the next important fact. This army officer and later politician with a passion for the East visited the rock with its inscriptions in the years 1835–1837, 1844 and 1847. Rawlinson edited the Old Persian and the Babylonian versions but gave his notes on the Elamite version of the inscription to Edwin Norris, who published them, accompanied by his own remarks, in 1855. This work may safely be called the first important grammatical study of the Elamite language.

From then on, various studies of the newly discovered language appeared (e.g. Oppert 1879), and progress on the knowledge of the language was steadily growing. One of the issues under debate remained the name to be given to the language. In this sense, Elamite may well be one of the languages with the greatest number of names given to it (in chronological order):

- (1) Median (Beer 1838; Westergaard 1844 and 1845; Hincks 1848; de Saulcy 1849² and 1850; Holtzmann 1851, 1852, and 1854; Oppert 1879; Strassmaier 1885; Bertin 1888).
- (2) Scythian Median (Rawlinson 1846).
- (3) Elamite (Löwenstern 1850b; Sayce 1874; Jensen 1891; Hüsing 1897, 1898a, 1898b, 1898c, and 1898d; Foy 1898; Bork 1900; Foy 1900).
- (4) Scythian (Oppert 1851: 105; Norris 1853 and 1855; Westergaard 1854; Spiegel 1881).
- (5) Sakian (Westergaard 1854).
- (6) Susian (Mordtmann 1862 and 1870; Lenormant 1874; Sayce 1874, who considered it as a dialect, next to Elamite; Halévy 1883; Budge 1888; Weis(s)bach 1890, calling Achaemenid Elamite “Neo-Susian”, and 1894; Jensen 1891; Foy 1895; Winckler 1896; Foy 1898; Bartholomae 1901, calling Achaemenid Elamite “Neo-Susian”).
- (7) Amardian (Sayce 1874, 1885 and 1890).
- (8) Anshanite (Delattre 1883).
- (9) Proto-Median (Sayce 1885 and 1890).

Elamite became the standard name from 1900 onwards, although as late as 1928 Scheil (1928: 40) still called the language Anshanite.³

Meanwhile, the excavations at Susa yielded a large number of new texts, furthering the research on this mysterious language. Nevertheless, these were almost exclusively royal inscriptions, which logically distorted the researchers’ image of the Elamite language. Almost no documentary texts were discovered. In fact, the first group of Elamite documentary texts ever found, the so-called Nineveh Letters (first mentioned by Strassmaier [1885]), was

excavated outside of Elam in Niniveh. In the early years of the Susa excavations only two groups of documentary texts were discovered: the Susa Acropole Texts (discovered in 1901) and the Susa Apadana Texts (found in the winter of 1909).

This situation drastically changed in the years 1933–1934 when Ernst Herzfeld found thousands of Achaemenid Elamite documentary texts in the Persepolis fortification. At once the extant corpus was multiplied. In 1936–1938 the Persepolis Treasury Tablets, another group of Achaemenid Elamite administrative texts, were found. Finally, in the excavation seasons of 1972–1974 at Tall-e Malyan (Anshan), an archive of administrative texts was found.

These findings gave a boost to the field of Elamite studies and scholars such as George Glenn Cameron, Richard Treadwell Hallock, Walther Hinz, Marie-Joseph Steve, François Vallat, Matthew Stolper and others intensively studied the grammar of this language. Grammatical studies are Labat 1951, Paper 1955, D'jakonov 1967, Reiner 1969, Grillot-Susini 1987 and 2008, Khačikjan 1998, Stolper 2004, Krebern timer 2005, Quintana Cifuentes 2010 and 2013, and Tavernier 2010 and 2011. Unfortunately, a detailed grammar of Elamite has not yet been published.

In 1987 Walther Hinz and Heidemarie Koch published their *Elamisches Wörterbuch*. Sign lists were published by Weissbach (1911; Achaemenid Elamite), Cameron (1948; administrative Achaemenid Elamite), König (1965; Old, Middle and Neo-Elamite), Steve (1967; Middle Elamite) and Hallock (1969; administrative Achaemenid Elamite). In 1992, the only syllabary comprising all periods of Elamite linguistic history was published by Marie-Joseph Steve.

Most Elamite texts were published in the series *Mémoires de la Délégation en Perse* (MDP). The two main collections of pre-Achaemenid Elamite royal inscriptions are König 1965 (EKI) and Malbran-Labat 1995 (IRS; re-editing various EKI texts). The Elamite versions of the Achaemenid Royal Inscriptions were studied by Weissbach (1911) and by Vallat (1977), but the latter work was unfortunately never published. In his study on the Bisotun inscriptions, Bae (2001) also included the Elamite version of it.⁴ In any case, a general edition of all Elamite versions of these inscriptions is still lacking.

Textual evidence

Elamite belongs to the so-called group of Limited Text Corpus Languages, implying that only a limited number of texts has been found. Yet the number and variety of Elamite texts is sufficient to enable a profound grammatical study of this language to be conducted, provided there is the awareness that many uncertainties remain.

Proto-Elamite (c. 3100–2900 BCE) and Linear Elamite (c. 2140

BCE)

As both writing systems are discussed in other chapters of this volume (Proto-Elamite by J. Dahl in Chapter 19 and Linear Elamite by F. Desset in Chapter 20), they do not need to be dealt with here.

Old Elamite (c. 2250–1500 BCE)

Old Elamite is badly documented, as the textual corpus is very limited. The oldest text written in cuneiform Elamite is a treaty (EKI 2) between the Old Akkadian king Naram-Sin and a king of Awan, a region situated to the north of Susiana. Unfortunately, the name of the Awanite king is not fully preserved, but it could be Helu or his successor Hita.

Next to this treaty there are four royal inscriptions, one of which is completely preserved. These inscriptions were produced for king Siruktuh (c. 1800 BCE), king Siwe-palar-hupak (first half of the 18th century BCE) and king Temti-Agun (c. 1726–1710 BCE; two inscriptions).

The Old Elamite textual corpus also contains two documentary texts, found at Susa (Lambert 1974) and dating from the 3rd millennium BCE. One is a small lexical list; the other is not entirely clear. In any case, both are probably school texts.

The occurrence of Old Elamite phrases, personal names, and loanwords in Sumerian and Akkadian texts from this period must of course also be mentioned. As can be expected, such texts come from Mesopotamia and Susa, where a mixed Elamite-Mesopotamian population was established. An example of such a phrase is *zizzirik zabarrik rišam tila rišam nap rišam* (YOS 11 5:2). Van Dijk (1982: 100–102) considers these passages as Elamite incantations. However, these phrases are incomprehensible, and this raises the suspicion that the Mesopotamian scribes simply put together in an unstructured way some Elamite words they knew (*riša*, for instance, means “great, big” and *nap* “god”). A fragment from Jena is considered by Krebernik to be part of an Old Elamite incantation.

Middle Elamite (c. 1500–1000 BCE)

The Middle Elamite language is commonly considered as the classical and pure Elamite. It owes this honourable position both to its grammatical situation and to its textual tradition. In this sense the position of Middle Elamite may be compared to that of Old Babylonian for the Akkadian language. It is also in this period that Elamite experienced a revival after king Humpan-u-mena decided to have his inscriptions recorded in Elamite.

About 175 royal inscriptions in several exemplars can be assigned to this period. They are commissioned by the kings Humpan-u-mena (EKI 4; IRS 21; Roche 2012 3–4; Walker 1981

192), Kitin-Hutran I (Steve and Vallat 1989), Untash-Napirisha (Vallat 1983; Basello 2013; Stolper 2014 152; Vallat 2011 89; EKI 5–15; Vallat 1981: 27; IRS 22–32; MDP 41; De Maaijer 1996: 70–72, nos. 3–7; Roche 2012 5–12; Stolper and Wright 1990; Walker 1981 193–199, etc.) and his spouse Napir-asu (EKI 16), Shutruk-Nahhunte I (EKI 17–28; IRS 33–4; De Maaijer 1996: 72, nos. 8–9; Roche 2012 13–16; Walker 1981 200–201), Kutir-Nahhunte II (EKI 29–31; IRS 35–37; Roche 2012 17; Walker 1981 202–204), Shilhak-Inshushinak I (EKI 32–59; Grillot and Vallat 1984; IRS 38–50; Sollberger 1965; Roche 2012 18–19; Walker 1981 203–213), and Hutelutush-Inshushinak (Stolper 2014 153; EKI 60–65; IRS 51–53), spanning a period from about 1375 BCE to about 1100 BCE. Interestingly, one text is bilingual (Akkadian-Elamite).

Most inscriptions, written on various materials, come from Susa and Chogha Zanbil, the great temple complex built by Untash-Napirisha. Other texts originate from Liyan (on the Persian Gulf coast), Anshan (Tall-e Malyan) and other sites in Fars and Khuzestan (e.g. Tepe Bormi, Tepe Pomp, Shushtar, Dizful).

Besides the royal inscriptions, an archive of administrative texts was discovered at Anshan (Stolper 1984). This archive comprises about 200 small texts, dated to the end of the 12th or the beginning of the 11th century BCE.

Before the reign of Humpan-u-mena, Akkadian was the prevailing language in the textual corpus in both royal and documentary contexts. Nonetheless, the 15th-century Akkadian texts found at Haft Tappeh, the capital of the Kidinuid king Tepti-ahar, contain various Elamite loanwords as well as personal names. This is, of course, not surprising, as these texts are well embedded in an Elamite cultural environment.

Neo-Elamite (c. 1000–530 BCE)

Although very interesting for the study of the Elamite language, this period has until now been the most neglected one, wedged as it is between the well-known Middle and Achaemenid Elamite linguistical periods.

Nevertheless, despite the lower number of texts known, the Neo-Elamite period may boast the largest variety in literary and documentary genres. Firstly, there are the royal inscriptions. About 30 of them are known and can be attributed to the reigns of the Susian kings Shutruk-Nahhunte II (EKI 71–73; IRS 54–57), Shutur-Nahhunte (Vallat 2011 91), Hallutush-Inshushinak II⁵ (EKI 77; IRS 58), Shilhak-Inshushinak II (EKI 78), Tepti-Humpan-Inshushinak (EKI 79–85; IRS 59–62) and Atta-hamiti-Inshushinak (EKI 86–89). Secondly, some high-ranked officials also ordered their own inscriptions. In this context one may mention the inscriptions of Shutruru (reign of Shutruk-Nahhunte II; EKI 74), Hanni (c. 620 BCE; EKI 75–76) and the Persepolis Bronze Plaque (first half of the 6th century BCE; unpublished).

The Neo-Elamite period is the only period where we see the presence of other literary

genres, albeit only two such texts have been discovered so far. One is a hemerological text (indicating favourable and unfavourable days), the other one is an omen text, partly a translation of §71 of the Babylonian divinatory composition *Iqqur īpuš* (Tavernier 2010: 214). Both texts are dated to the second half of the 7th century BCE.

Next to these literary texts are some documentary ones. The most interesting archive of administrative texts is without doubt the so-called Susa Acropole Archive, consisting of about 299 texts. A smaller archive, the so-called Susa Apadana Archive, has a more juridical character and is composed of seven texts. Both archives are dated to the first half of the 6th century BC.

A highly interesting corpus is certainly the Nineveh Letters, a group of about 27 diplomatic letters (Álvarez-Mon 2010: 200–201; Gorris 2013, with literature) found at the Assyrian capital Nineveh (Weissbach 1902), Susa (MDP 9 88; MDP 36 79; Lambert 1977) and in the Arjan tomb (Álvarez-Mon 2010: 166–167 and Pls. 91–92).

Some texts have also been found outside of Susa and its environs. The rulers of a region called Samati (southern Luristan) left their short inscriptions on metal vases allegedly found in the Kalmakara cave (Henkelman 2003: 214–227). There are also three tablets from Armavir Blur (Armenia), whose character was disputed⁶ but that are now believed to be fragments of a late Neo-Elamite letter (Vallat 1997). Finally, other late Neo-Elamite letters are MDP 36 81 and Rezayi-Sadr 2015.

Achaemenid Elamite (c. 530–331 BCE)

The last phase of Elamite as a written language begins with the Achaemenid period. When the Achaemenid king Darius I decided to have his glorious reign eternalized in a large rock inscription at Bisotun, he originally chose to have it recorded in Elamite. Only later were an Old Persian and a Babylonian version added. As his successors took over this habit, various Elamite versions of Achaemenid royal inscriptions are now known.

The Achaemenid Royal Inscriptions are engraved on rock, weights, architectural elements (e.g. window frames), vases and so on. The youngest one is the Elamite version of an inscription of king Artaxerxes III (358–337 BCE).

The second major corpus of Achaemenid Elamite texts are the so-called Persepolis Fortification Tablets and Persepolis Treasury Tablets. The first group, named after the Persepolis fortification where it was discovered, consists of several thousands of texts (Hallock 1969 and 1978; Arfaee 2008) with a purely administrative character. Dating from 509–493 BCE, they deal especially with the ration system in the Persepolis region (see Henkelman 2008: 65–179 for a nice introduction). The Fortification Archive is not yet fully published.

The Persepolis Treasury Archive found in the Persepolis Treasury (hence its modern name)

is composed of various texts dating to the period 492–458 BCE. It deals mainly with payments in silver (Cameron 1948, 1958, and 1965).

Similar texts, albeit in an extremely small number, have also been discovered in Susa (MDP 11 308), Qaṣr-i Abu Naṣr (but probably originating from Persepolis; cf. Henkelman, Jones and Stolper 2006) and Kandahar (Afghanistan; Fisher and Stolper 2015) and indicate the existence of parallel archives in these administrative centres. Especially the Kandahar textual fragments are important as they stimulate discussion on the spread and use of Elamite language in the Achaemenid Empire.

The main characteristic of Achaemenid Elamite is the heavy influence of Old Persian, insofar as that the Old Persian word order or other grammatical features (e.g. increased use of prepositions) are often adopted in the Elamite versions of the Achaemenid inscriptions. While it is very important to realize this while studying Achaemenid Elamite grammar, one need not go so far as Gershevitch, who claimed that Achaemenid Elamite was nothing more than alloglottographically written Old Persian (Gershevitch 1979; *contra*: Tavernier 2008: 75–76).

Post-Achaemenid Elamite (c. 331 BCE – 14th century CE)

Despite the absence of Elamite texts from the post-Achaemenid period, it is entirely possible that the language was still spoken. The name Kamnaskires, borne by three kings of Elymais in the 2nd and 1st centuries BCE, appears in Babylonian cuneiform sources as *Qabinaškirī* (McEwan 1986) and is certainly of Elamite origin (the Elamite form being *kapniškir* “treasurer”). Other examples of Elamite names attested in the Hellenistic period are Anzaze (the wife of Kamnaskires III) and Pittit. The fact that the coin legends of Kamnaskires I, II and III are written in Greek may well be the result of the adoption of Greek as a monetary language. The vernacular language in Elam may still have been Elamite.

This idea is reinforced by the New Testament. In the *Acts of the Apostles* (probably written about 80–90 CE) Elamite is still perceived as a separate and autonomous language (*Acts* 2:9–11).

For the Sassanid period (224–642 CE), one may mention the passage in the Talmud (Megillah 18a) where it is said that the Book of Esther was recited each year on the 15th of the month Adar before the Jews of Susa in the proper language of the region, possibly Elamite.

Finally, but also far less certain, there is the awkward language called Khuzī by various Arab authors (9th–10th centuries CE). This language is described as satanic and incomprehensible and was certainly not Arabic, Persian, Syriac or Hebrew. Possibly we are dealing here with a late variant of Elamite. An example is the quote by Abū Iṣāq al-Iṣṭakhrī (first half of the 10th century AD): “The common people of Khuzistān speak Persian and Arabic, but they have also another language, Khūzī, which is neither Hebrew nor Syriac or Persian”. This quote was repeated by two later authors: Ibn Hawqal (second half of the 10th

century AD) and Yāqūt al-Hamawī (1179–1229 AD).

Writing system and phonology

Writing system

Not surprisingly, the greatest part of Elamite texts was written by means of the Mesopotamian cuneiform writing system. The Elamites were just one of many peoples adopting this system.

Two other scripts were also used in the Susa and Anshan region: the so-called Proto-Elamite and Linear Elamite writing systems.

The oldest Elamite text written in cuneiform is the so-called Naram-Sin Treaty (cf. *supra*) and the likely reason for the use of this script is that it was an international treaty. As the Old Akkadian Empire was the most powerful of the two parties, the selection of this system is not surprising. Unfortunately, the scarcity of Elamite texts of the 3rd millennium impedes more profound research into the adaptation process of the cuneiform writing system by the Elamites. As a matter of fact, only two other such Elamite texts are known (Tavernier 2010: 202).

In the beginning, the Elamite variant of Mesopotamian cuneiform writing was an accurate copy of its Mesopotamian equivalent, meaning that one can easily read Old Elamite texts without understanding the language. There were not many Elamite peculiarities.

In the Middle Elamite period, some signs were specifically used in Elam, for example, ŠÀ, which was used for the syllable /ša/, whereas in Mesopotamia it was used as a Sumerogram for Akk. *libbu* “heart”. At the end of the same period (until c. 1100), a development slowly started that would eventually lead to the Neo-Elamite and Achaemenid forms of cuneiform writing.

When after a period of about four centuries (c. 1100–700 BCE) Elamite texts reappear, this development is still active. In the late Neo-Elamite and Achaemenid periods (c. 646–330 BCE), the Elamite writing system is quite different from its contemporaneous Mesopotamian equivalent, especially with regard to the sign shapes.

A second tendency in the evolution of the Elamite cuneiform script is simplification. Various signs expressing the same phonemes disappear from the syllabary. An example is the series expressing the velar stop followed by *a*. Whereas in the Old and Middle Elamite periods the signs GA, KA and QA (with value *ka*₄) are well established in the Elamite syllabary, it is only QA (itself for the first time attested in the inscription of Kitin-Hutran I) that occurs in late Neo-Elamite and Achaemenid Elamite inscriptions. The last attestation of GA is found in an inscription (EKI 72:6) of Šutruk-Nahhunte II (717–699), whereas the sign KA is for the last time attested in three inscriptions (EKI 34:4, 54 ii 14 and 56:4) of Shilhak-Inshushinak I (c.

1150–1120 BCE), whose inscriptions generally make use of QA (Steve 1992: 144).

A second aspect of simplification is the almost complete absence of polyphony (assigning various values to one sign). Contrary to the Neo-Babylonian contemporary cuneiform script, each sign has only one value. The two exceptions are the signs TUM and BAD. TUM has two values (*tum* and *ip*), but the latter is only used to denote the plural suffix *p*. BAD also has two values (*bad* and *be*), but here the first value is practically only used in Elamite notations of Iranian names (other examples are listed in Steve 1992: 145). This almost complete absence of polyphony is also found in Hittite.

A remarkable exception to the rule of simplification is the creation of a new value for the sign EL, which in the Achaemenid period has a value *ram* and can also have a value *tam* (Steve 1992: 164, no. 564).

As can be expected, the Elamite cuneiform writing system includes logograms, determinatives and phonetic complements. The logograms may be divided in two groups:

- (1) Real logograms, as attested in Mesopotamia: They are exclusively used for substantives. Some Elamite accents are nevertheless attested: E for É “house”, PI+PÍR for SIG₅ “transferred” (normally the combination IGI+PÍR), (ŠE.)Ì.GIŠ for (ŠE.)GIŠ.ì “oil”, and so on (cf. Stolper 2004: 69).

In Elamite, the fact that a word is considered a logogram is indicated by putting the sign MEŠ behind it. MEŠ is never used to indicate plural forms, contrary to its original Mesopotamian usage.

- (2) Pseudo-logograms: This category encompasses Elamite or even Akkadian words that are nonetheless followed by the sign MEŠ, as if they were logograms themselves. Examples are ab-be-be^{meš} for Elamite *appepe* “food” (Achaemenid Elamite), ha-al^{meš} (Neo-Elamite) and hal^{meš} (Achaemenid Elamite) for Elamite *hal* “land”, tar-mu^{meš} (Achaemenid Elamite) for Elamite *tarmu*, a kind of cereal, and ul-hi^{meš} (Neo- and Achaemenid Elamite) for Elamite *ulhi* “dwelling”. An example of Akkadian words is za-al-mu^{meš} for Akkadian *šalmu* “statue” in three late Middle Elamite administrative texts (TTM 4:2, 6:4 and 86:24). Note also the interesting form za-al-mu-pi^{meš} (TTM 5:2), where an Elamite plural marker is added to the Akkadian loanword and where the whole construction is then considered a logogram.

The determinatives are similar to those of Mesopotamia, but the Mesopotamian postpositional determinatives (e.g. MUŠEN) were not adopted, with the exception of MEŠ, already discussed, and KI (e.g. Old Elamite a-ak-ti^{ki}, a-ga-dè^{ki} and a-wa-an^{ki}).

Phonetic complements, too, occur in Elamite. The Mesopotamian writing system has two types of them:

- (1) Those used to indicate the precise grammatical character of a logogram, for example, DINGIR-lum for *ilum* “god” (in the nominative case).
- (2) Those used to specify the correct reading of a CVC-sign, for example, id-^{di}din-nu for id-din-nu.

In Elamite, only the second type is attested, for example, [an]-nu-kur^{ir}-na for an-nu-kur-na, du-kaš^{iš}-da for du-kaš-da, ^{ma}máš-zí-ka₄ for máš-zí-ka₄, pa-ráš^{iš}-da for pa-ráš-da and so on. These phonetic complements occur predominantly in the administrative texts from the Achaemenid period.

One can also find the so-called “broken writings”, more precisely, sequences with a structure CV₁-V₂C (e.g. na-iš). Such sequences were pronounced CV₁C (e.g. /naš/). This type of writings grew out of necessity when, in the context of the simplification of the script, various signs (e.g. IL and UŠ) disappeared from the syllabary in the Neo-Elamite period. This obliged scribes to find alternative ways to write sequences such as /kil/ or /tuš/. Both sequences had to be written using another sign, which resulted in spellings such as ki-ul for /kil/ and du-iš for /tuš/. This type of broken writings is called “forced broken writings”.

Nevertheless, the ancient scribes went further and started to use broken writings, too, when the sign was not deleted from the syllabary. As a consequence of this, a sequence /naš/ could be written na-iš, even if the sign ÁŠ was still used.

Lastly, there are the morphological spellings. These are spellings of the type (C)VC-VC, e.g. ba-at-ip ‘feet’, la-ha-ak-ir-ra “he who is hidden”. These spellings are used to separate grammatical morphemes from the root to which they are attached. So ba-at-ip stands for *pat-p* (plural), whereas ir-ra in the other example (*laha-k-r-a*) indicates that the root is declined here in the 3rd person animate.

Phonology

Elamite phonology is not easy to study, for different reasons, among them the following:

- (1) The Sumero-Akkadian cuneiform writing system is not designed to denote Elamite, and some Elamite sounds simply cannot be rendered by cuneiform signs.
- (2) The writing system has known its own development, which also has bearing on the study of Elamite phonology.
- (3) Elamite is a language isolate, so there is no comparative material from other languages.
- (4) In all likelihood, Elamite also had its dialects, but unfortunately these are practically unknown to us. This, too, has its influence on the study of Elamite phonology.

Nevertheless, there are some source types that enable us to conduct research on this topic:

- (1) The rendering of Elamite lexemes and proper names in non-Elamite texts.
- (2) The rendering of non-Elamite lexemes and proper names in Elamite texts.
- (3) Graphical variations within Elamite.

This chapter does not aim to present a fully detailed discussion of Elamite phonology. It will rather limit itself to enumerating some peculiar phonological aspects and presenting a table of Elamite phonemes.

Elamite has some specific phonological aspects (cf. Grilhot-Susini 2008: 11–12). Examples are:

- (1) In all probability, vowels had a nasal variant (as, for instance, in Lycian, with *Ã* and *Ë*). This is indicated by spellings such as Humpan next to Hupan or *suki* next to *sunki*.
- (2) /e/ and /i/ may be confused. This is also the case in Hittite.
- (3) Final /e/ and /i/ can be omitted.
- (4) Vowels in direct contact with each other are subject to contraction: /i/ + /a/ = /i/, /a/ + /u/ = /o/ or /aw/, /u/ + /i/ = /u/.
- (5) Vowel length is never expressed by the Elamite cuneiform writing system.
- (6) In the later periods, a development /u/ > /i/ was active. As a result, most signs of the u-series (e.g. MU, NU, etc.) could also be pronounced with *i*. Nevertheless, the vowel /u/ did not disappear from the Elamite phonological inventory. Examples of this shift are *halpu-* > *halpi-*, *nu* > *ni* and *tallu-* > *talli-* (cf. Tavernier 2007: 278–285).
- (7) The specific use of the signs U and *Ú* strongly suggests the existence of /o/ or /aw/ in Elamite, denoted by the sign U.
- (8) There was no distinction between voiced and voiceless consonants. Most likely, a distinction between *fortis* and *lenis* consonants was active. This distinction was in some cases rendered by graphic doubling of consonants.
- (9) Assimilation may occur, for example, *illina* < *in lina* “it as a gift” (Middle and Neo-Elamite), *imme* “not” < *in-me* (Middle and Neo-Elamite), *ittuniš* < *in tuniš* “he gave to him”, *ittunik* < *in tunik* “it was given to him” (Middle and Achaemenid Elamite; more examples in Hinz and Koch 1987: 742). As a matter of fact, it is always *n* that is assimilated.
- (10) The vowel *i* is often used as supporting vowel, for instance to connect a root and its suffix. A nice example is the variants *takme* and *takkime* “life”. With just two exceptions, *takme* is only used in Old Elamite and Middle Elamite (Untash-Napirisha). In the subsequent periods (Kutir-Nahhunte II and later), the usual form is always *takkime*. Only Humpan-u-mena prefers *takkime*, but this may be the result of a Liyanite dialect, as this king may very well have originated from this place.

(11) /H/ gradually disappeared, and this in all positions:

- Initial: *hiyan* > *iyān*.
- Medial: *lahliš* > *lališ*.
- Final: *tunih* > *tuni*.

This evolution had some morphological consequences, such as the loss of the distinction between 3rd singular and 3rd plural in conjugation I (cf. infra).

The postulated Elamite phonemes are:

- Vowels: /a/, /e/, /i/, /o/, /u/ and perhaps /ə/
- Consonants

	<i>Stops</i>		<i>Glides</i>		<i>Affr.</i>	<i>Sonorants</i>		
	Fortis	Lenis	Fortis	Lenis		Lat.	Trill	Nasal
Labial	p	p' (b)		f or v				m, m'(?)
Dental	t	t' (d)						n, n'(?)
Velar	k	k' (g)						
Palato-alveolar				š	č			
Alveolar			s	s' (z)	ts	l	r	
Laryngeal				h				
Retroflex						ll	rr	

Elamite has at least the syllable types (C₁)V, (C₁)VC₂ and (C₁)VC₂C₃ (whereby C₂ generally is /l/, /ll/, /m/, /n/, /r/, /rr/, /š/ or /h/).

Morphology

Word formation

The majority of Elamite lexemes consist of one or two syllables. Attested forms are CV (e.g. *ta*- “place, put”), VC (e.g. *ak* “and”), VCV (e.g. *iki* “brother”) and CVCV (e.g. *zana* “lady”). A lexeme like *tinki*- “bring; remove” is doubtful. It may have a structure CVV, but it is equally possible that it contains a nasalized vowel. Nevertheless, the absence of spellings without /n/ and the existence of a verb *tikka*- “want” are arguments in favour of the first theory. Another example that is dubious for the same reason is *henpe*- “to wither”.

Some roots are exclusively used for the formation of nominals, but most Elamite roots can be used to form both nominal and verbal lexemes.

Elamite roots may produce derived words by adding a thematic vowel (e.g. *mur* “place”;

murū “ground; soil”), by full reduplication (e.g. *hut-* “work”; *huthut* “provisions”), by reduplication of the last syllable (e.g. the PN Haltete, derived from Halte; frequently used to form anthroponyms) or by adding suffixes (cf. *infra*).

The Elamite language possesses many compounds, which may be divided into five categories:

- (1) Two nouns: *kik-murun* “world, universe” (“heaven-earth”), *hal-menir* “land-regent” (“land/authority holder”), *kap-niškir* “treasurer” (“treasure-guardian”).
- (2) Noun and its complement: *nan-hante* “advice” (“word-love”).
- (3) Noun and participle: *hut-halik* “sculpture” (“work-perfected”).
- (4) Two participles: *huttak-halik* “handiwork, accomplishment” (“done-perfected”).
- (5) Infinitive and noun: *paha-huttip* “protective (gods)” (“protect-doers”).

Nominals

Like many other languages Elamite possesses substantives, adjectives, pronouns and nominal forms of the verb (infinitive, participle, etc.). The latter category will be discussed in the chapter on verbs.

Elamite does not have the masculine/feminine/neuter distinction. The Elamite nominal inflection rather adheres to an animate/inanimate distinction. Examples of both genders are:

- (1) Animate: *elt(i)* “eye”, *nap* “god”, *pat* “foot”, *ruh* “man; human being”, *sunki* “king”, *tepti* “lord”, *zana* “lady”, and so on.
- (2) Inanimate: *hal* “land”, *hiš* “name”, *husa* “wood; tree”, *kap* “treasure”, *kat* “seat, throne, location”, *kik* “heaven”, *kir/kur* “hand”, *kuk* “roof; protection”, *pet* “battle”, *siri* “ear”, *širi* “welfare, luck”, *te* “favour”, *ulhi* “house”, and so on.

In concordance with many other languages, Elamite has a singular and a plural. Dual forms are not attested.

Nouns

Nouns belonging to the animate class can belong to three personal classes in the singular, which correspond with the three persons of the verbal conjugation. The plural does not make this distinction.

Kinship nouns (*amma* “mother”, *atta* “father”, *iki* “brother”, *puhu* “child”, *šak* “son”, *šutu* “sister”, *rutu/riti/irti* “spouse”) are generally not accompanied by classifying suffixes. Only in late Neo-Elamite and Achaemenid Elamite they may take such a suffix in combination with a

possessive pronoun, for example, *pak-p-e* “his daughters”, *šak-r-e* “his son”.

The inanimate class only has a form corresponding to the verbal 3rd person singular. No plural suffix is attested with inanimate nouns.

The classifiers are:

	<i>Animate</i>	<i>Animate</i>	<i>Inanimate</i>
Person	Singular	Plural	Singular
1st (locutive)	<i>-k</i>		
2nd (allocutive)	<i>-t</i>		
3rd (delocutive)	<i>-r</i>	<i>-p</i>	<i>-me</i>
			<i>-n</i>
			<i>-t</i>

Examples:

	<i>Animate</i>	<i>Animate</i>	<i>Inanimate</i>
Person	Singular	Plural	Singular
1st (locutive)	<i>sunki-k</i> “(I, the) king”		
2nd (allocutive)	<i>sunki-t</i> “(you, the) king”		
3rd (delocutive)	<i>sunki-r</i> “(he, the) king”	<i>sunki-p</i> “(they, the) kings”	<i>sunki-me</i> “kingship” <i>siya-n</i> “temple” <i>hala-t</i> “clay”

Suffixes of the 3rd person singular are used to produce agent nouns (only in the animate gender), for example, *hutti-r* “maker” (from *hut-* “to make”, with epenthetic *i*), *kat-ri* “throne holder, that is, regent”, *lipa-r* “servant” (from *lipa-* “to serve”).

In the inanimate gender, the suffix *-me* is used to form abstract nouns, for example, *husa-me* “forest” (from *husa* “wood”), *lipa-me* “service”, *sunki-me* “kingship” (from *sunki* “king”), *takki-me* “life”.

In all likelihood, Elamite originally had two suffixes *-n* that could both be used with nouns. The first one has a nominal origin and refers to a location: *ayi-n* “house”, *muru-n* “earth” (from *muru* “ground, soil”), *siya-n* “temple”, and so on. It is therefore possible that various toponyms ending in *-n*, such as Awan, Hupsen, Šušān/Šušēn and Ubašin (Ubasiye in a Middle Assyrian text) in fact belong to this category of nouns.

The verbal suffix *-n* may be etymologically identical with the nominal suffix and is used to construct participles, some professional names (e.g. *šati-n* “priest”) and some verbal derivative nouns (e.g. *li-n* “gift”, from *li-* “give, donate”; *murta-n* “establishment, installation”, from *murta-* “to put in place”). The late Elamite genitive suffix *-na* is probably the result of a combination of this suffix and the suffix *-a*.

Less clear forms are those with an apparent suffix *-m* (e.g. *siru-m* “javelin” and *titti-m* “arrow”). As a suffix *-m* is otherwise unknown in Elamite, it is most likely a variant of the suffix *-n*.

Roots may produce nouns using more than just one suffix. For example, both Achaemenid Elamite nouns *muši-n* and *muši-me* mean “account” and are derived from the verb *muši-* “calculate, register”.

Inanimate nouns may be followed by a suffix from the animate gender. In fact, the delocutive singular suffix *-r* may indicate a *nomen instrumentalis*, for example, *kunni-r* “window”, *suhte-r* “altar”.

Mostly the suffixes are preceded by a supportive vowel *i*, but sporadically the suffix may be immediately attached to the noun, as in *kat-r-i* “throne holder”. In this case, it is mostly followed by the vowel *i*.

Finally, Elamite has no real case system. The only case suffixes are genitive *-na* and locative *-na*, and both are mostly attested in Neo- or Achaemenid Elamite.

Adjectives and adjectivized participles and substantives

Elamite adjectives are not a separate morphological category and have the same structure as substantives. They also use the same classifiers, for example, *riša-k* “(I, the) great”, *riša-r* “(he, the) great”.

Sometimes a substantive which is tied to another substantive by a suffix may be considered an adjective, for example, *sunki-r peti-r ak tari-r* “a king, (both) hostile and allied” (lit. “king, enemy and ally”; MDP 41 2:6; Middle Elamite).

In the later periods the genitive suffix may also form adjectives: *GURUŠ-na* “male”, *hasa-na* “adult”, *MUNUS-na* “female”, *malu-na* “wooden”, *puhu-na* “young”.

Passive verbal participles in *-k* may also have an adjectival function: *halpi-k-a* “dead”, *hani-k* “loved”, *haštu-k* “venerated”, *katu-k-a* “alive”, *mišnu-k-a* “bad”. These adjectives may in turn be transformed into substantives by adding the delocutive suffix: *hutla-k-r-i* “someone who is sent, envoy”, *ippa-k-r-a* “strong one”, *ištu-k-r-a* “weak person, weakling”, *katu-k-r-a* “living person”.

Pronouns

Personal pronouns

The personal pronouns are the only Elamite nominals using a case system. The pronouns of the 1st and 2nd person have a nominative/dative form without inflectional suffixes and an accusative form characterised by a suffix *-n*.

Pers.	Singular				Plural			
	Nom./Dat.		Acc.		Nom./Dat.		Acc.	
	Ancient	Recent	Ancient	Recent	Ancient	Recent	Ancient	Recent
1st	<i>u</i>	<i>u</i>	<i>u-n</i>	<i>u(-n)</i>	<i>nika</i>	<i>nuku</i>		<i>nuku-n</i>
2nd	<i>ni</i>	<i>nu</i>		<i>nu-n</i>	<i>num</i>	<i>numi</i>	<i>numu-n</i>	<i>numi-n</i>

The resumptive pronoun *ir*, in addition to the demonstrative pronouns (cf. *infra*), is used as personal pronoun of the 3rd person:

	Singular		Plural	
	Nom./Dat.	Acc.	Nom./Dat.	Acc.
Animate	<i>i-r</i>	<i>i-r</i>	<i>ap(pi)</i>	<i>appi-n, appa-n</i> (Ach. El.)
Inanimate	<i>i(-n)</i>	<i>i(-n)</i>		

Some particular forms are attested in Achaemenid Elamite. First of all, the 1st person singular accusative may be expressed by forms such as *unan*, *unahan*, *unanku* and *uhanaunku*. Their precise etymology remains unclear. In addition, a pronoun *hu*, acting as synonym for *i(r)*, appears in Achaemenid Elamite. This form might be explained by vocalic harmony, as it is only attested in the expression *hu tunušta* “he gave”.

Reflexive forms are Achaemenid Elamite *tu-n* “oneself” and *(h)isu(-ti/a)* “only himself; him personally”.

Resumptive pronouns

Nominal elements in a phrase may sometimes be referred to later on by one or more pronouns situated immediately before the verb. Such pronouns are called resumptive. A nice example is ^dIMak^dŠala *lansitippa apun murtah* ‘Adad and Šala, as golden (statues) I placed them’ (MDP 41 13:3). In the Middle Elamite period, they are rarely used in pronominal clusters in a *sandhi* writing: a-pu-un du-ni-ih for *ap u in tunih* “To them (= the gods), I gave it (= the temple)” (MDP 41 4:2var.). This is no longer the case in the later periods where only one pronoun is used, for example, *u Auramašta un niškišni* “Me, may Ahuramazda protect me” (DN_{ae} 41–42, DP_{fe} 19–20). In this phrase *u* is clearly a *nominativus pendens*, as the correct form should have been *un*.

The forms *ir* (animate) and *i(n)* (inanimate) are frequently used as resumptive pronouns indicating the direct object of conjugated verbs.

In Achaemenid Elamite, *kaš* sometimes replaces *hi* as resumptive pronoun with dative function: PN₁*šak* PN₂*kaš kurmaka* “PN₁, the son of PN₂, to him it was entrusted” (PF 269:8).

The element *aha* (Old, Middle and Neo-Elamite), *ah* (Neo-Elamite and Achaemenid Elamite), *ha* (Achaemenid Elamite) may also be used as resumptive pronoun. In Old and Middle Elamite, it takes the corresponding classifying suffix (*ahat*, *ahar*, *ahan*), but from the later Middle Elamite period onwards it starts to lose its nominal character and eventually becomes an adverb.

Unfortunately, the precise meaning of *aha* is not always clear. Sometimes it is the simple adverb of location “here” (e.g. in *ir ahar murtah* “I have placed it here”; MDP 41 45:3; Middle Elamite), but according to some scholars (Hallock 1973: 148, n. 4; Stolper 2004: 77, with literature) elsewhere, the meaning is more general and some contexts even exclude a usage of “here”. In my opinion, this is possible, but not always certain. The example cited by Stolper, *upat lansitippa tepuh ulhi i aha kuših* “I fashioned goldened bricks, with them I built this house” can very easily be translated “I fashioned bricks, here I built this house”. Neo-Elamite *siyan^dMÜŠ.LAMšumuna erentum uhna tipiha ah šilhah* “In order to *šumu* the temple of Inshushinak, I fashioned stone bricks and here/with them I strengthened (the temple)” (EKI 77:2), is not unequivocal either.

Demonstrative pronouns

Proximal demonstrative pronouns (“this”) occur in texts dated to all periods of the Elamite linguistic history. Distal demonstratives (“that”) appear in the Achaemenid period. The Elamite demonstratives can all be used adjectivally as well as substantively.

		<i>Singular</i>		<i>Plural</i>	
		Proximal	Distal	Proximal	Distal
Animate	Ancient	<i>i</i>		<i>ap</i>	
Inanimate	Recent	<i>(h)i</i>	<i>hupe-r(r)i</i>	<i>ap(pi)</i>	<i>hupe-pi</i>
	Ancient	<i>i</i>			

Possessive pronouns

Elamite possessive pronouns can be divided in two groups: enclitic possessive pronouns and non-enclitic possessive pronouns. One has to admit, however, that the distinction is not that strict, as non-enclitic pronouns can also be used as enclitic ones. Sometimes it is even impossible to determine whether a pronoun is enclitic or not.

Non-enclitic possessive pronouns may be used enclitically, but this can only be determined

by the spelling in cuneiform. In a spelling *li-pa-ru-ri* for *lipar-uri* “my servant” the pronoun *uri* is clearly enclitic.

The non-enclitic possessive pronouns (type 1) are actually nothing more than personal pronouns that are positioned after the possessed item and that correspond with it by nominal classifiers.

Examples: *napi-r u-r-i* “my god”, *ayani-p u-pe* “my relatives”, *takki-me u-me* “my life”, *rutu ni-r-i* “your wife”, *att-e-r-i* “his father”, *lipa-r-i-r-i* “his servant”, *ayani-p nika-p-i* “our relatives”, *lipa-p appini* “their servants”. Sometimes, the suffix of the possessed item may be omitted: *ulhi nuka-me* “our house” (correctly *ulhi-me nuka-me*), *siyan appi-me* “their temple” (correctly *siyan-me appi-me*).

The *i* following the classifier is merely supportive and was most likely not pronounced. Accordingly, a form written *na-pír-ú-ri* was pronounced /napirur/.

Forms with more than one suffix occur already in the Middle Elamite period: *takki-me u-mi-ni* “my life” (EKI 31:4). In Achaemenid, the forms *unina* and *unini* were independent pronouns: *petip unina inni tirimanki* “the enemies that do not call themselves mine” (DB_e II:23), *taššup unina* “my troops” (DB_e II:18), *halmi appa appuka unini* “the seal that was formerly mine” (PF 2067:11), *ulhi unini-ma-mar* “from my house” (PF 1835:5–6).

The enclitic possessive pronouns (type 2) have a different character, as they are not declined and accordingly they do not respect the distinction between classes. Nevertheless, they may be connected with the possessed item by a nominal classifier, for example, *lipar-e-r* “his servant”. The most frequently attested one is undoubtedly *-e* “his, her, its” (already in Old Elamite, *li-e*₁₁ “his gift”). The others are *-ape* (written *a-pe-e*) “their”, *-ni* “your” and *-nika* “our”.

Examples: *hiš-e* “his name” (Middle, Neo- and Achaemenid Elamite), *hiš-ap-e* “their name” (EKI 42:5 and 6, in a variant; Middle Elamite), *Nahhunte-Utu ak puhu-e* “Nahhunte-Utu and her children” (EKI 31:4; Middle Elamite), *NUMUN-ni* “your offspring” (DB_e III:6; Achaemenid Elamite), *tip-ap-e* “their tablet” (Nin 1:8; Neo-Elamite).

In Achaemenid Elamite, the pronoun *-ta* “my” appears in the expression *atta-ta* “my father”. The pronoun *-še* “his, her, its” is the Elamite rendering of the Old Iranian possessive pronoun *-šai* > *-šē* “his, her, its”.

Person and class	Singular				Plural			
	Type 1		Type 2		Type 1		Type 2	
	Ancient	Recent	Ancient	Recent	Ancient	Recent	Ancient	Recent
1st animate	<i>u-r(i)</i>	<i>uri,</i>		<i>-ta</i>	<i>nika-pi</i>	<i>nuka-me</i>	<i>-nika</i>	
1st inanimate	<i>u-me(-ni)</i>	<i>unina/i,</i> <i>unan</i>			<i>nika-me</i>			
2nd animate	<i>ni-ri</i>		<i>-ni</i>	<i>-ni</i>				
2nd inanimate								
3rd animate	<i>i/e-r(i)</i>		<i>-e</i>	<i>-eli, -še</i>			<i>-ap(p)e</i>	<i>-ap(p)e</i>
3rd inanimate	<i>i-me</i>				<i>api-me</i>	<i>appini</i> <i>hupirrini</i>		

The Elamite language also has a way to express the reflexive possessive pronoun, by combining the noun *tuh* “property” with an enclitic possessive pronoun. Examples are *hiš tuh-e* “his own name” (Middle Elamite) and *Kambuziya halpi tuhema halpik* “Cambyses died his own death” (DB_e I:33; Achaemenid Elamite).

Relative and interrogative pronouns

The Elamite relative pronouns are *akka* “who” and *appa* “that, which”. A plural form *akkap* “who” is attested in the late Neo-Elamite (only twice) and Achaemenid periods. Stolper (2004: 76) argues that in Achaemenid Elamite the inanimate relative pronoun is doubled in order to form the accusative of the animate relative pronoun. Nonetheless, the fact that an inanimate form is used to create animate declined forms is not very logical. The example which Stolper cites comes from the Bisotun inscription: ***appi*** 9 *sunkip appa u ... mauriya* “These are the nine kings whom I captured” (DB_e III:60). This example instead looks influenced by Old Persian syntax (the Old Persian version having ***imaiy*** 9 *xšāyaθiyā tyaiy adam agrbāyam* [DB_p IV:31–32]): *appi* is nothing more than the equivalent of OP *imaiy* (as usual), while *appa* corresponds with OP *tyaiy*. Accordingly, *appi* is used here as a demonstrative, not as a relative pronoun.

Another aspect of Old Persian influence is the use of relative pronouns as indicators of appositional relations in various ways:

- (1) Between substantive and attribute: PN *akka magus* = Old Persian PN *haya maguš* “PN the magian”, literally “PN, who is a magian” (various times in DB_e); PN *akka GN-ma kurdabattiš* “PN, the chief of workers at GN”, literally “PN, who is the chief of workers at GN” (PF-NN 1509:11–12). Here the relative pronoun is used as definite article.
- (2) Between a noun and its complement: *taššup appa unina* “my troops”, literally “the troops that are mine” (DB_e II:18), *taššup appa petipna* “the troops of the enemy”,

literally “the troops that are of the enemy” (DB_e II:18), *tattam appa unina* = OP *dātam tya manā* “my law”, lit. “the law that is of me” (DN_{ae}:16).

An original Elamite usage of this pronoun seems to be its presence in dating formula: *pel appa 24-ummamana* “In the 24th year” (lit. “In the year that is the 24th; PF 1202:10–11).

The invariable pronoun *mur* (spelled mu-ru or mu-ur) means “where”: *u Šutruk-Nahhunte husahitek muru pakkah humaka* “where I, Shutruk-Nahhunte saw a *husahitek*, it was taken along” (EKI 28A:27; Middle Elamite), *kat hima mur halmarraš hi kušik* “on this terrace, where this fortress has been built” (DPf_e:8; Achaemenid Elamite), *Hatamtam hatuma mur u inni um parimanka* “in the area of Elam, where I shall not be going now” (PF 1858:9; Achaemenid Elamite).

Indirect questions also appear in Elamite: *mur humahšita inme turnah* “I do not know where they have brought it” (EKI 28A:23; Middle Elamite). Another example is *akka kušišta imme turnah* “I do not know who has constructed it” (Walker 1981 211:8–9; Middle Elamite).

Elamite has two attested interrogative pronouns: *akka* “who” and *appa hamak* “of what sort”. One could imagine that there was also *appa* “what”, but *appa* is never attested as an interrogative element.

Indefinite pronouns

The relative pronoun *akka* with the suffix *-r* is in Elamite the indefinite pronoun *akkar* “someone”. Although it is predominantly attested in negated clauses, it also appears in affirmative ones in later periods.

- (1) Affirmative: *Mâsa akkari* “a certain Mâsa” (PF-NN 2506:6–7; Achaemenid Elamite).
- (2) Negated: *sunkip urpuppa akkara upat aktippa inri huhtanra* “(of) the former kings, nobody made sandstone bricks” (EKI 17:1–3; Middle Elamite), *sunkip urpuppa akkara hute husahitekipa inri turnaš* “(of) the former kings, nobody has known the way to the *husahitek*” (EKI 28A:8; Middle Elamite), *appan lakkimme akkari ukki inni hutta* “I did harm to nobody” (DB_e III:82; Achaemenid Elamite), *akkari aški ... inni lilmaš* “Nobody attained something” (DB_e I:40–41).

The pronoun *aški* (Neo-Elamite and Achaemenid Elamite) means “something” and with negation “nothing”, as in the example cited above. *Appan*, only attested in Achaemenid Elamite, has a meaning “ever, someday” (e.g. *Akka appan lakkimme huttiš* “who has ever done harm” [DB_e III:83–84]).

Adjectival pronouns

The adjectival pronouns are *unra* “each” and *marrita* “all, entire”.

Negation

The negation is expressed by *in*. In Old, Middle and Neo-Elamite (and exceptionally also in Achaemenid Elamite) nominal classifiers may be attached to this negation particle, resulting in forms like *inki* (1st singular), *inri* (3rd singular), *inni* (inanimate) or *inme* (inanimate). Examples are Old Elamite *inki tun* “I will not be receiving” (EKI 2 IV:16), Middle Elamite *inki henka* “I do not implore” (MDP 41 1:4), Neo-Elamite *inki in tununkumar* “I will not give it” (EKI 74:rev.16, with *mar* indicating direct discourse), Achaemenid Elamite *lipar inri kir* “There is no servant” (PF 1859:16). Clearly these suffixes make the negation particle correspond with the subject.

From the Middle Elamite period onwards, the particle *inni* gradually absorbs all other forms and by the Achaemenid period it also replaces the animate forms to become the generally but not exclusively used negating element.

Particles

Vocative

In Middle and Neo-Elamite, the particle *e* indicates the vocative: *e Inšušinak* “O Inshushinak”. This lexeme disappeared, although not completely (cf. *malla e* “O subject”; DNbe:35), in the Achaemenid period, as is proven by *nu sunki akka meššin lipnikti* “You, king who will arise hereafter” (DB_e III:63–64).

Numerals

The Elamite numerals are poorly known, because they are nearly always written by numbers (as is also the case in the other languages using cuneiform script). The only fully written numeral is *ki* “one”, which is used with both animates (*ruh ki-r* “one man”; DB_e I:60) and inanimates (*pel ki-ma* “within one year”; DB_e III:47).

In Achaemenid Elamite, this lexeme may also take a meaning “each”, when directly attached to its determinatum: *sut-ku-me sat-ki-me* “each night and each day” (Vallat 1981, line 3; Vallat 1983, line 5; Middle Elamite). Note that, if this analysis is true, one would have the oldest attestation of the /u/ > /i/ shift (cf. supra), as both texts are dated to the reign of Untash-Napirisha. More likely, however, the use of the sign KU may be the result of vowel harmony.

In Achaemenid Elamite, the ordinal numerals are generally followed by *-ummema*, *-ummena* or *-ummemana*. In all probability, one is dealing here with constructions of the nominal suffix *-me* in combination with *-ma* and *-na*. Less frequently attested variants are *-umme*, *-mema*, *-mena* and *-memana*. Fractions are denoted by the suffixes *-irmaki* and *-kurmaki*.

Adverbs

Adverbs as such are attested from the Middle Elamite period onwards. Four types can be distinguished:

- (1) An ancient nominal form of the inanimate class: *appuki-me* “formerly”, *pat-me* “below”, *ukku-me* “above”, and so on.
- (2) A lexeme in its naked form (no prefixes or suffixes attached): *tippa* “before, in front of” (in ZA.BAR^{meš} *tippa hutlak* “copper has been sent in front of”, that is, “copper has been issued”).
- (3) A reduced determinative locative: *sara* “below”.
- (4) A derived form of the passive participles in *-k*, for example, *kappak* “together” (lit. “which is brought together”), *šillak* “strongly, very, much” (lit. “which is reinforced, strengthened”). This type is exclusively attested in Achaemenid Elamite.

Postpositions

As already mentioned, the Elamite language makes regular use of postpositions to indicate spatial and temporal relations between different elements of a phrase. In the Middle and early Neo-Elamite periods, the postpositions are not very numerous and are rather indicators of spatial relations (referring to place or direction). Examples are:

- (1) *ma* “in” (locative postposition): *pinikku-ape inni melkah talluh ak siyan Inšušinak-ma tah* “Their votive gifts(?) I did not destroy. I inscribed (them) and I placed (them) in the temple of Inshushinak” (EKI 48:58; Middle Elamite).
- (2) *sima* “before, in front of” (spatial): *hunipin sima* “in front of the *hunipin*” (EKI 2 XI:23; Old Elamite); *Inšušinak napir uri i sima tah* “I placed it before Inshushinak, my god” (EKI 20:15; Middle Elamite).
- (3) *sira* “before, in front of” (spatial): *Inšušinak ir sira ani uzzun* “Inshushinak, before him may he not walk around” (EKI 45 VI:9; Middle Elamite).
- (4) *tur* “for”: *sunkime tur hih* “I prayed for the kingdom” (EKI 4C:8; Middle Elamite),

takki ume tur hih “I prayed for my life” (MDP 41 1:3; Middle Elamite).

Note that some of these particles continue to be used in the more recent periods.

In the late Neo-Elamite and especially the Achaemenid periods, the postpositions become more and more frequently used. This is probably a reaction to the gradual weakening of the Elamite nominal and syntactical system. This weakening process took place under Old Persian influence. Examples are:

- (1) *em* “from”: removal from something. It is only used with the verb *tu-* “take” and a pronoun (singular *i* or plural *ap*). Example: *meni Kammatta akka makuš Kanbuziya em-i tuš* “Then Gaumāta the magian took away from Cambyses” (DB_e I:35).
- (2) *hatma* “in, at, for”: locative, both temporal and spatial. Examples: *pel 5 hatma* “for a period of five years” (PF 312:5–6); *2 palum hatma* “at two storehouses” (PF 588:6–7).
- (3) *(ik)ki* “to”: direction. Examples: *Mašti zana Tarriša-ra ikki hahpuhu* “To Mašti, Lady of Tarrisa, we pay attention”, that is, “We obey Mašti, Lady of Tarriša” (EKI 76:8; Neo-Elamite); *anka tuppi nikmar Parnaka ikki tippe tanta* “When you send a tablet from you to Parnaka” (PFa 28:12).
- (4) *ikk(i)mar*: “away from” (only with animates). Examples: PAPHiŠE.BARKameniš *Puktena ikkamar dakima kutka* “This total (of) grain was taken from Puktena at Kamenuš to various (places)” (PF 1941:20–21); *anka tuppi nikmar Parnaka ikki tippe tanta* “When you send forth a tablet from you to Parnaka” (PFa 28:12).
- (5) *intukkime* “because of”. Example: *hupe intukkime mušimme inni hutttakka* “Because of this, the accounting was not done” (PF 2084:20).
- (6) *itaka* “with”. Example: *meni Mimana taššup itaka meri ir taka sak* “Then Mimana, with the troops, in pursuit of him, advanced” (DB_e III:32).
- (7) *lakka* “beyond”. Example: *Yauna ... akkap kam lakka marrišta* “The Ionians who have seized the area beyond the sea” (XPh_e:20).
- (8) *ma* “in; for; in front of; by means of” (spatial and temporal). Example: (grain) *kantima taka* “(grain) has been deposited in the storehouse” (PF 230:3), ITUšakurrizišma “in the month šakurriziš” (PF 659:5–6).
- (9) *mar* “from” (only with inanimates). Example: *huttahamar* “away from what I did” (Lambert 1977 B:6–7; late Neo-Elamite), *Harassumar* “from (the place) Harassu” (PF 98:6–7).
- (10) *-na* “of”, extremely frequent genitive indication. Examples: *puktu Tepti Tiruturna* “the assistance of the Lord Tirutur” (EKI 75:6; late Neo-Elamite); *sunki tayušpe miššadanašpe-na* “king of all kinds of lands” (DNa_e:7–9). In the latter example, the suffix refers to the preceding two words.
- (11) *sima* “before, in front of” (spatial). Example: *zalmi umini ... Mašti ...sima kitenuh* “I

have protected magically my statue before Mašti” (EKI 76:4; Neo-Elamite).

- (12) ŠÀ-*ma* (Hallock 1969, 753) or *šama* (Hinz and Koch 1987, 1128) “within, among”. Examples: *untaš šama* (MDP 36 81:6; late Neo-Elamite, context unclear); KUŠ GUD*hupe šama* “included among those cowhides” (PF 77:8).
- (13) *tippa* “before, in front of”. Example: 3GUD IN*Umpartašpena sunki tippa makka* “3 cattle in pasture(?), of the people from Umpartaš were consumed before the king (i.e. at his court)” (PF 691:1–4).
- (14) *tupaka* “to, in the direction of, towards; concerning”. Example: *akkari aški Kam-ma-ad-da makuš tupaka inni lilmak* “No one attained anything concerning Gaumāta the magian” (DB_e I:41; Achaemenid Elamite).
- (15) *ukku* “on”. Examples: *ahte ukkurir máštemanra* “he will let accrue the interest at his expense”, literally “his interest upon him he will let accrue” (MDP 11 302:5; late Neo-Elamite); *kutta halat ukku kutta*KUŠ*ukku* “both on clay and on parchment” (DB_e IV:5).

In all likelihood, *lakka* and *tupaka* have a participial origin: *la-k* “crossed”, *tupa-k* “directed, brought to”.

A real preposition is *kuš* “until” (attested from the Middle Elamite period onwards).

Verbal morphology

Verbal roots

Elamite verbal roots may be divided in three groups:

- (1) Simple roots: *li-* “give, deliver”, *ta-* “put, place”, *tunu-* “give, donate”, and so on.
- (2) Reduplicated roots, whereby the reduplication may express some kind of plurality. There are two types:
 - (a) Full reduplication ($C_1V_1 > C_1V_1C_1V$): *li-* ~ *lili-* “give, deliver”, *ta-* ~ *tatta-* “put, place”.
 - (b) Partial reduplication:
 - Repetition of the first syllable ($C_1V_1C_2V_2 > C_1V_1C_1V_1C_2V_2$): *kata/u-* ~ *kakkata-* “to live”, *sikka-* ~ *sissikka-* “to set up”, *tallu/i-* ~ *tatallu/i-* “to write” (from older **taltallu-*).
 - Repetition of the first consonant before the second one ($C_1V_1C_2V_2 > C_1V_1C_1C_2V_2$). This is the most frequent type of reduplication: *hapu-* ~

hahpu- “to hear, listen”, *hutta-* ~ *huhta-* “to do”, *kazza-* ~ *kakza-* “to forge”, *kuši-* ~ *kukši-* “to build, construct”, *pera-* ~ *pepra-* “to read”, *peti-* ~ *pepti-* “to become hostile, revolt”.

- (3) Compound roots: *mur* “place” + *ta-* “to put” > *murta-* “to place, set up”. In most cases, the verb *ma-* “to put” is one of the elements: *el* “eye” + *ma-* > *elma-* “consider, think”, *ki/ur* “hand” + *ma-* > *kurma-* “to allocate”, *tu(h)* “self” + *ma-* > *tuma-* “to take, receive”.

Fixed combinations of nouns and verbs also exist, for example, *pu/ikti ta-* “to place help” > “to help, assist”.

Many lexemes have both nominal and verbal forms: *irša* “big, great/become great, increase”, *me* “behind/follow”, *tu(h)* “property/take”, and so on. If the nominal form ends in a consonant, the verbal root is formed by adding a vowel, as in *hut* “work”/*hutta* “to do, make” or *kuš* “offspring”/*kuši-* “to build, construct”.

Roots usually end in a vowel. Only in Old and Middle Elamite are some consonantal roots attested: *hap-* “to hear, listen” (*hapti*)/*hapu-* (*haputni*), *kel-* “to command, order” (*kelhuna*, *kelti*)/*keli/a-* (*kelir*), *kut-* “to carry; hold”/*kuti/u-*. As can be seen from the listed examples, these roots developed to vowel roots in later periods.

Conjugations

Elamite verbs have three conjugations. Whereas the first one is a purely verbal conjugation, both the second and third ones are nominal.

Conjugation I is only attested with transitive verbs and expresses a completed action. It consists of the verbal base and personal endings. In the following table asterisked forms are not attested as such.

	<i>Middle Elamite</i>		<i>Achaemenid Elamite</i>	
Person	Singular	Plural	Singular	Plural
1st	- <i>h</i>	- <i>hu</i>	- $\emptyset$ (or - <i>y</i> ?)	- <i>ut</i> ⁷
2nd	- <i>t</i>	- <i>ht</i>	*- <i>t</i>	*- <i>t</i>
3rd	- <i>š</i>	- <i>hš</i>	- <i>š</i>	- <i>š</i>

	<i>Middle Elamite</i>		<i>Achaemenid Elamite</i>	
Person	Singular	Plural	Singular	Plural
1st	<i>kulla-h</i>	<i>kulla-hu</i>	<i>marri-$\emptyset$</i>	<i>hutta-ut</i>
2nd	<i>hap-t</i>	<i>hutta-ht</i>	*- <i>t</i>	*- <i>t</i>

3rd	<i>hutta-š</i>	<i>hutta-hš</i>	<i>hutta-š</i>	<i>hutta-š</i>
-----	----------------	-----------------	----------------	----------------

Examples:

Due to the disappearance of /h/, late Neo- and Achaemenid Elamite have lost the graphic distinction between singular and plural forms, except in the forms of the 1st person.

With regard to the 1st person singular in Achaemenid Elamite, forms like *marriya*, *pariya*, *peleya*, and *tenkiya* apparently have a connecting phoneme /y/ between the final /i/ of the root and the suffix /a/.

The two other conjugations could also be labelled participial conjugations, since they are both based on the verbal participles. The main characteristic of **conjugation II** is the presence of *k* just after the verbal root. The forms have an intransitive, passive, completed and adjectival value. The endings of this conjugation are the nominal classifiers.

	<i>Middle Elamite</i>		<i>Achaemenid Elamite</i>	
Person	Singular	Plural	Singular	Plural
1st	*- <i>k-k</i>		- <i>k-it</i>	
2nd	*- <i>k-t</i>		- <i>k-t</i>	
3rd	- <i>k</i>	- <i>k-p</i>	- <i>k-ø</i>	- <i>ø-p</i>

Examples:

	<i>Middle Elamite</i>		<i>Achaemenid Elamite</i>	
Person	Singular	Plural	Singular	Plural
1st			<i>šinnu-k-it</i>	
2nd			<i>katu-k-t</i>	
3rd	<i>hutta-k</i>	<i>hutta-k-p</i>	<i>hutta-k-ø</i>	<i>šinnu-ø-p</i>

As is clear from this table, some forms are not attested. Note also that in the 3rd singular (Achaemenid Elamite), the expected suffix *-r* is not written. When it is attached to the passive participle it denotes a noun: *halpik* “dead”, *halpikra* “dead person”.

In Achaemenid Elamite, the 1st person suffix is always written. The same suffix may also be attached to nouns or pronouns in order to express the verb “to be”: *uEŠŠANA appi-ni-k-it* “I am their king” (XPhē:12), *inni titukra-k-it* “I am not a liar” (DBē III:79–80). Note that the element *-it* seems to be identical to the 1st plural suffix of conjugation I (Stolper 2004: 79).

Conjugation III is also nominal, but here the conjugational consonant is *n*. This conjugation has an incomplete value and is used with transitive as well as intransitive verbs. In Achaemenid Elamite, this conjugation is the equivalent of the Old Persian subjunctive (which expresses future).

	<i>Middle Elamite</i>		<i>Achaemenid Elamite</i>	
Person	Singular	Plural	Singular	Plural
1st	<i>-n-k</i>	<i>n-un-k</i>	<i>-n-k</i>	<i>n-un</i>
2nd	<i>-n-t</i>		<i>-n-t</i>	
3rd	<i>-n-r</i>	<i>-n-p</i>	<i>-n-r</i>	<i>-n-p</i>

Examples:

	<i>Middle Elamite</i>		<i>Achaemenid Elamite</i>	
Person	Singular	Plural	Singular	Plural
1st	<i>hutta-n-k</i>	<i>turu-n-un-k</i>	<i>na-n-k</i>	<i>hutti-n-un</i>
2nd	<i>hutta-n-t</i>		<i>na-n-t</i>	
3rd	<i>hutta-n-r</i>	<i>tahha-n-p</i>	<i>na-n-r</i>	<i>na-n-p</i>

The nominal suffixes of the 1st person plural are not yet known with certitude. Nevertheless, a suffix *-un-* (followed by the first person suffix *-k* in the Middle Elamite period) may probably be distilled in forms such as *turununki* “we say” (*turu-n-un-k-i*; EKI 54 I:99; Middle Elamite) and *huttinun* “we make” (*hutti-n-un*; DB_e II:25 etc.; Achaemenid Elamite). The form *hinunka*, occurring in an unclear formula, is under debate. Some scholars break it up in *hi-n-un-k* (1st plural from *hi-*), which is the more probable analysis, whereas others believe it is a conjugation II 1st singular form from *hinu-* (*hinu-n-k*).

Each of these three conjugations has a parallel one, the so-called *m*-conjugation (usually labelled Im, IIm and IIIm). These conjugations are formed by inserting *-ma-* directly after the root (*hutti-ma-* “to do”) or after the verbal substantive (*pepšir-ma-* “to renew”). In Achaemenid Elamite, it only occurs after the root itself.

Examples:

Conjugation Im and IIm forms are rare. Only the verb *tuma-* is regularly attested.

The *m*-conjugations are less frequent than their counterparts. The infix *-ma-* may be an auxiliary verb, but the precise function and meaning of these conjugations are not clear. Various proposals have been made: durative, intensitive, iterative, voluntative, optative and so on.

When, from the late Neo-Elamite period onwards, Elamites came in close contact with Iranian-speaking people (cf. Chapter 9 on Elamites and Iranians), more and more Iranian influence becomes visible in the Elamite language. This has led to some degree of systematisation in the use of the verbal conjugations in Achaemenid Elamite. The Old Persian future forms (subjunctive) were always rendered by Elamite forms of conjugation III, whereas Old Persian presents appear in Elamite as forms of the IIIm-conjugation.

Nomino-verbal forms

Participles

The Elamite verb has two participles, which do not take suffixes and may also have an adjectival function. The first one is composed of the root and the suffix *-k* and represents a passive form (e.g. *hutta-k* “made”). It is mostly translated by a passive participle.

The second one is composed of the root and the suffix *-n*. It indicates an active and incomplete action (e.g. *hutta-n* “making”). The link of both participles with the conjugations II and III is clear.

Infinitives

The verbal root without any suffixes may have the function of an infinitive, for example, GN₁-*mar* GN₂*laki* “to cross from GN₁ to GN₂”. An infinitive can also be noted by a form of conjugation III: *Inšušinak ur tahhanra kukunnum pitte-n-a* “Inshushinak is commanding me to surround the *kukunnum*” (EKI 72:9–10; Neo-Elamite), *meni ušera TUP^{meš}talli-ma-n-a* “Then I ordered an inscription to be written” (XVe:24; Achaemenid Elamite; the Old Persian equivalent is *pasāva adam niyaštāyam imam dipim nipaištana iy*). Note the subordinating suffix *-a* on the infinitives.

An Old Persian infinitive can be expressed by a suffixed form of conjugation III: *šaparakumme hutta-ma-n-r-a* “to do battle” (frequently in DB_e; Old Persian *hamaranam cartana iy*).

Verbal noun (cf. Grillot-Susini 2008: 24–25)

The Elamite language has a verbal noun with the same form as the active participle. Examples are *li-n* “gift” (from *li-* “to give”), *murta-n* “installation” (from *murta-* “to install”) and *piti-n* “transfer, assignment” (from *piti-* “to transfer, reassign”).

Verbal modes

Imperative

The Middle Elamite imperative uses the conjugation I form of the 2nd singular, for example, *hap-t* “listen”, *ten-t* “be merciful”. In Neo- and Achaemenid Elamite, forms of the 3rd singular are used: *mite-š ... halpi-š* “go forth and slay”, *hutta-š* “do”. In enumerations, the first form

may drop its ending, as in *mite ... halpi-š*. There is no distinction between singular and plural.

Prohibitive

This mode can be indicated by conjugation III forms preceded by the particle *anu/i*: *anu izzun* “may he not walk around”, *anu titkime elmanti* “Do not consider it a lie”, *hupe anu hutnant* “do not do this”, *tumpir ani in kutunk* “may I not have an adversary”. Note also *anu ur turnampi* “lest they know me” (DBe I:40), which is the equivalent of an Old Persian subjunctive (*mātyamām xšnāsātiy*, DBp I:52).

-ni, -na (= -ni + -a)

Conjugation I and II forms, followed by one of these suffixes, are indications of the precativ mood. In other words, they express a wish, a desire: *huttahš-ni* “may they do”, *katakt-ni* “may you live”, *taš-ni* “may he put, place”, *telak-ni* “may it be dedicated”, *tunuš-ni* “may he give” and so on. In Achaemenid Elamite, the Old Persian optatives are mostly rendered by such a form. *Sura-k nima-k-ni* and *sura-k-ni* (both in DNbe) are two translations of the same Old Persian expression, that is, *miθa kariyaiš*.

The suffixes may also be asseverative (*huttah-ni* “I really did”) or concessive (*kušik-ni* “Although he did build”).

-ti, -ta (= -ti + -a)

Verbal forms accompanied by one of these two suffixes are omnipresent in Elamite. Nonetheless, the suffixes are mostly attested with a 3rd singular form of conjugation I, as in *huttašta* “he has done”, *kušišta* “he has built”, or *lišta* “he gave, he delivered”. In Middle Elamite, -ti and -ta often occur in subordinated clauses. In Achaemenid Elamite, however, they are also attested in principal phrases. In the Achaemenid Fortification and Treasury Tablets, they may indicate the end of the text.

Most likely these forms express a completed action in the past (anteriority) and are accordingly normally translated by means of a perfect or pluperfect: *akka kušišta imme turnah* “I do not know who has constructed it” (Walker 1981 211:8–9; Middle Elamite); *u siyan nappanna hutta appa Kammatta akka makuš sarišta* “I (re-)constructed the temples of the gods that Gaumāta the magian had destroyed” (DBe I:48–49; Achaemenid Elamite).

According to Krebernik (2005: 179–180), both suffixes may also appear after nominal forms, for example, after pronouns and indications of some quantity (*marpipta* “all, everything”, *hupemarrita* “all that”, *2-pipta* “all two (of them), both”) and adverbs (*amta* “presently”). Here too, the suffixes seem to express some sort of completeness, a quantitative totality.

In general, this suffix is the last morpheme of a cluster, but again exceptions are attested, for example, *kuši-š-t-a-p* “women who have given birth” (Achaemenid Elamite).

The suffix *-a* can have two functions:

- (1) As an indication of subordination. In this sense, it was originally the indication of nominal predicates of a subordinate clause. In Achaemenid Elamite, it is usually attested after subordinated verbal forms. When, however, the clause was accompanied by a relative pronoun or a conjunction, it could be omitted.
- (2) The suffix may also have a coordinating function: *maurriša appin halpiš* “He captured and slew them” (DB_e III:33–34).

In both cases, it connects phrases or parts of phrases and thus helps to bring some structure in the text.

Syntax

Syntactic relations

Many languages express their syntactic relations by means of a causal system. Elamite was not one of them, albeit it is not void of any causal element either (cf. *supra*).

Lacking such a causal system, Elamite had to find other ways to express its syntactical relations. In fact, Elamite used a system of classifying suffixes and relational particles. Thereby the word order is very important. The usual word order is:

subject (+ classifier) - indirect object (+ classifier) - direct object (+ classifier) - resumptive pronoun(s) - verb.

Examples:

- (1) *u siyan kuših Inšušinak ak Simut ap in tunih* “I constructed the temple. The gods Inshushinak and Simut, to them I gave it” (MDP 41 4:2var.; Middle Elamite).
- (2) *Par-Uli pak hanikuri i tunih* “To my dearest daughter Par-Uli I gave it” (Sollberger 1965: 31:8–11; Middle Elamite).

In the later periods, word order became freer, partly because of the emergence and frequent use of postpositions to indicate the precise relations between words. This emergence was in any case partially due to influence from the Indo-European Iranian languages, in particular Old Persian, with which the Elamites came into intense contact in the Neo-Elamite period.

In Elamite, **classifying suffixes** are used to indicate the precise relationship between a noun and its complement(s). As already mentioned, they can be found anywhere, not only

after substantives or pronouns but also after the negation particle or locative adverbs (e.g. *aha*).

If A is determined by B, the structure of the group is A-suffix B-suffix, for example, *sunki-k Anšan-i-k* “I, the king of Anshan” (whereby *i* has no morphological value), *u sunki-k Hatamti-k* “I, the king of Elam”, PN *sunki-r Hatamti-r* “PN, the king of Elam”; *siyan Upurkupak zana hute-hiši-p-ri-ni* “the temple of Upurkupak, the Lady of the noble ones” (EKI 64:6; Middle Elamite).

So-called **relational particles** (e.g. *pat* “foot”, *šara* “under”, *ukku* “head; on”), in combination with classifiers, are used to indicate spatial relationships between nouns or pronouns: *pat-r* “he who is under”, *šara-r* “he who is below”, *ukku-p* “those who are above”.

Examples:

- (1) *petir uri ni patr ur tatni* “my enemy, may you place (him) below me”, literally “my enemy (*peti-r u-ri*), you (*ni*) below (*pat-r*) me (*u-r*) may you place (*ta-t-ni*)”. (EKI 45 IV:8–9; Middle Elamite). Here the classifier *-r-* connects *pat* and *u*.
- (2) *Untaš-Napiriša ukkur ir murtan* “putting Untash-Napirisha on top of him”, literally “Untash-Napirisha on top of (*ukku-r*) him (*i-r*) putting (*murta-n*)” (MDP 41 44:3; Middle Elamite).
- (3) *Nahhunte ir šarara ani uzzun* “Nahhunte (= the sun), may he not walk around under him”, literally “Nahhunte, him (*i-r*) under (*šara-r-a*) not (*ani*) may he walk (*uzzu-n*)” (EKI 45 8:6; Middle Elamite).
- (4) *zuhmutu ... Inšušinak napir ur(i) i sima-Ø tah* “The stela, ..., I have put it before Inshushinak, my god”, literally “stela (*zuhmutu*), Inshushinak, my god (*napi-r u-r-i*), it (*i*) before (*sima*) I have put (*tu-h*)” (EKI 22:5–7; Middle Elamite).
- (5) *Petip ... patp up rappakna* “May the enemies ... be bound under me”, literally “the enemies (*pet-i-p*) under (*pat-p*) me (*u-p*) may they be bound (*rappa-k-na*)” (EKI 54 I:90; Middle Elamite).

In Achaemenid Elamite, these constructions still exist, but the majority of syntactic relations are expressed by the postpositions. An example of the older construction is *sunki-r murun hi ukku-r* “king on this earth”, literally “king earth this on” (frequent in Achaemenid Elamite; the Old Persian equivalent is *xšāyaθiya ahyāyā būmiyā*).

Coordination

Coordination is expressed in Elamite both asyndetically and syndetically by means of the conjunction *ak*. In Achaemenid Elamite (royal inscriptions), this lexeme is also used to introduce a paragraph.

Kutta “and” is especially attested in Achaemenid Elamite and therefore scholars have long thought that it was a compound of Elamite *ak* and Old Persian *utā* “and”. Nevertheless, this hypothesis is weakened by the occurrence of *ku-da* in a late Neo-Elamite inscription (EKI 76:15). Furthermore, it would be strange to have a compound with words from both Elamite and Old Persian. On the other hand, *ak* and *kutta* can be combined in enumerations, for example, *Parsip ak kutta matap ak kutta tayuš appa taye* “The Persians as well as the Medes as well as the other nations” (DB_e I:36).

Subordination

Originally, subordinate phrases were inserted in the text asyndetically (i.e. without being introduced by a subordinating conjunction). They took a particle *-a* to indicate the subordination. Examples are:

- (1) *u Šutruk-Nahhunte Inšušinak napir uri ur tahhanra Akkat halpuh* “me, Shutruk-Nahhunte (*u Šutruk-Nahhunte*), my god Inshushinak (*Inšušinak napi-r u-ri*) me (*u-r*) commanding (*tahha-n-r-a*), I destroyed (*halpu-h*) Akkad (*Akkat*)”, or, alternatively, “when my god Inshushinak, commanded it to me, Shutruk-Nahhunte, I destroyed Akkad” (EKI 24a:5; Middle Elamite). Here *tahhanra* is made subordinate by the presence of the suffix *-a*.
- (2) *Pelala kullanka kulla ur tumpānra ak turunka huttanra Siyankuk siyan ime upat hussipme kuših* “I have built (*kuši-h*) with baked bricks (*upat hussi-p-me*) the *Siyankuk*, her temple (*siyan i-me*), for Pelala, who, when I implore (her) (*kulla-n-k-a*), fulfills (*tumpa-n-r-a*) the prayer (*kulla*) for me (*u-r*), and, when I say (something) (*turun-k-a*), effectuates it (*hutta-n-r-a*)” (EKI 10b:2–3; Middle Elamite), literally “for Pelala, I imploring (her), fulfilling the prayer for me and, I telling (something), effectuating it, the *Siyankuk*, his temple, of bricks I constructed”.

It is clear that the distinction between the relative and the various possible adverbial clauses is not always very visible, as the last phrase may also be translated “because Pelala fulfills the prayer for me when I implore (her) and executes (it) when I say (something), I have built the *Siyankuk*, her temple, with baked bricks”.

The form *intikka* is disputed. Some scholars see in it a subordinating particle indicating the goal. They analyse the form as a passive participle of *inti-* “to intend” in phrases such as *intikka ak ... kuših* “so that ... I built”, literally “was intended and ... I built”. Others consider it an adverb, the forerunner of Achaemenid Elamite *intukkime*, meaning “for that reason, therefore”. The contexts in which this lexeme occurs not being entirely clear, the debate will probably continue.

Besides the asyndetic construction, subordinate phrases may also be expressed by subordinating conjunctions. This happened more frequently in the late Neo-Elamite and Achaemenid periods. Such conjunctions are *anka* “when”, *appa anka* “after”, *kuš* “until”, *meni sap anka* “after”, *sap* “while, when”, *sap appa* “when” and *sap innu* “as long as”. Usually the subordinate phrase is situated before the main verb.

In Achaemenid Elamite, the subordinated verb is rendered by Conjugation III or III_m form. This only happens, however, when the main verb is *šera*- “command, order” (e.g. *meni u šera TUP^{meš} tallimana* “then I ordered an inscription to be written”; XVe:24).

Direct discourse

In Neo-Elamite and Achaemenid Elamite, direct discourse is indicated by *-man-k* (1st singular), *-ma-r* (3rd singular) or *-ma-p* (3rd plural), all positioned at the end of the direct discourse. Possibly, these three forms belong to a verb *ma-* “say”, as might be suggested by the following examples: *ir unsaha ma-ra tirinra* “‘I paid him’, he says” (MDP 9 306:2; Neo-Elamite), *hamer 6 kušukum hatuma tamušam Anturzana hutta mara* “At that time he said: ‘In 6 *kušukum* I made the libations of Anturza’” (PF 770:10; Achaemenid Elamite).

In Achaemenid Elamite, the most used *verbum dicendi*, used to introduce the direct discourse, is *tiri-* “say” (e.g. *hi zila ap tiriya miteš ... halpiš* “He spoke thus to them: ‘Go ... and kill’”; DB_e II:14–15), but *na-* “say” and *titu-* “lie” are also attested in this role (e.g. *titukka nanri* “he lied, saying”; DB_e III:49; Achaemenid Elamite).

One specific class of documents was always considered direct discourse, not only in the Elamite culture, but basically in all Ancient Near Eastern cultures: letters. This is made clear by the introductory formulas (e.g. *PN turuš PN₂ nan turuš* “Say to PN, PN₂ says, saying”). The combination of *na-* and *tiri-* is also found in Achaemenid Elamite: *PN u tiriša nanri GUD inni šari...mara* “PN spoke to me, saying: ‘The cattle is not at hand’” (PF 1792:6–7).

Abbreviations

- DB_e Elamite text of the Bisotun inscriptions of Darius the Great. See Bae 2001 and Aliyari Babolghani 2015.
- DB_p Old Persian text of the Bisotun inscriptions of Darius the Great.
- EKI Royal inscriptions in Elamite in König 1965.
- IRS Brick inscriptions in Elamite and Akkadian from Susa (and Chogha Zanbil) in Malbran-Labat 1995.
- MDP Administrative tablets from the Acropole of Susa published in Scheil 1907.

- MDP 11 Elamite inscriptions and tablets in Scheil 1911.
- MDP 36 Elamite tablets in Paper 1954.
- MDP 41 Royal inscriptions in Elamite and Akkadian from Chogha Zanbil in Steve 1967.
- PF Elamite administrative tablets from the Persepolis Fortification archive in Hallock 1969.
- PF-NN Unpublished Persepolis Fortification tablets edited by R.T. Hallock, now collated by W.F.M. Henkelman and partially available online through OCHRE (Online Cultural and Historical Research Environment, Persepolis Fortification Archive Online, <http://ochre.lib.uchicago.edu/PFA_Online/>).
- TTM Elamite tablets (mainly administrative) from Tall-e Malyan in Stolper 1984.
- YOS 11 Incantations in Van Dijk et al. 1985.

Notes

- ¹ This research has been funded by the Interuniversity Attraction Poles Programme initiated by the Belgian Science Policy Office (IAP VII/14: “Greater Mesopotamia: Reconstruction of its Environment and History”).
- ² Some critical remarks on de Saulcy’s ideas, more precisely on the alleged close relationship between “Median” and Turkish, were uttered by Löwenstern (1850a).
- ³ See Basello 2004 and, more recently, Lindner 2015: 276–297.
- ⁴ See now Aliyari Babolghani 2015, Henkelman et al. 2017 and Henkelman and Kuhrt forthcoming.
- ⁵ On the name form (Hallutush-Inshushinak and not, as usually mentioned, Hallutash-Inshushinak), see Tavernier 2014.
- ⁶ According to Diakonoff and Jankowska (1990) the three tablets are Neo-Elamite fragments of an Elamite version of Gilgamesh, but that seems very unlikely. Koch (1993) assumes that one is dealing here with Achaemenid Elamite administrative texts.

Bibliography

- Aliyari Babolghani, S. 2015. *The Elamite Version of Darius the Great’s Inscription at Bisotun*. Tehran: Nashr-e Markaz (in Persian).
- Álvarez-Mon, J. 2010. *The Arjān Tomb: At the Crossroads of the Elamite and the Persian Empires*, Acta Iranica 49. Leuven: Peeters.
- Arfaee, A.A. 2008. *Persepolis Fortification Tablets* (Ancient Iranian Studies Series 5). Tehran: The Centre for the Great Islamic Encyclopaedia.
- Bae, C.-H. 2001. *Comparative Studies of King Darius’s Bisitun Inscription*. Cambridge, MA.
- Bartholomae, Chr. 1901. Arica XIV. *Indogermanische Forschungen* 12: 92–150.

- Basello, G.P. 2004. Elam between Assyriology and Iranian Studies. In: Panaino, A. and Piras, A. (eds.) *Schools of Oriental Studies and the Development of Modern Historiography* (Melammu Symposia 4). Milano: Università di Bologna and Istituto Italiano per l'Africa e l'Oriente, 1–40 and Pls. I–VI.
- . 2013. A Middle Elamite Inscribed Brick in the National Museum of Oriental Art, Rome. *Elamica* 3: 1–33.
- Beer, E.F.F. 1838. Über die neuesten Forschungen zur Entzifferung der Keilschrift. *Allgemeine Literatur-Zeitung* 1: 1–47.
- Bertin, G. 1888. *Abridged Grammar of the Languages of the Cuneiform Inscriptions*, London: Trübner & Co.
- Bork, F. 1900. Zur Elamischen Iteration. *Orientalistische Literaturzeitung* 3: 8–12.
- Budge, E.A.W. 1888. On a Babylonian Weight with a Trilingual Inscription. *Proceedings of the Society of Biblical Archaeology* 10: 464–466.
- Cameron, G.G. 1948. *Persepolis Treasury Tablets* (Oriental Institute Publications 65). Chicago: The University of Chicago Press.
- . 1958. Persepolis Treasury Tablets Old and New. *Journal of Near Eastern Studies* 17: 161–176.
- . 1965. New Tablets from the Persepolis Treasury. *Journal of Near Eastern Studies* 24: 167–192.
- Delattre, A.-J. 1883. *Le Peuple and l'Empire des Mèdes jusqu'à la fin du règne de Cyaxare* (Mémoires des Savants étrangers publiés par l'Académie Royale des Sciences, des Lettres and des Beaux-Arts de Belgique 45). Brussels: F. Hayez.
- De Maaijer, R. 1996. Recently Acquired Cuneiform Texts. *Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden te Leiden* 76: 69–84.
- D'jakonov, I.M. 1967. Elamskij Jazyk. In: idem, *Jazyki Drevnej Perednej Azii*, Moskva: Nauka, 85–112 (in Russian).
- Diakonoff [=D'jakonov], I.M. and Jankowska, N.B. 1990. An Elamite Gilgameš Text from Argištihenele, Urartu (Armavir-blur, 8th century B.C.). *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 80: 102–123.
- Fisher, M.T. and Stolper, M.W. 2015. Achaemenid Administrative Tablets, 3. Fragments from Old Kandahar, Afghanistan. ARTA 2015.001, www.achemenet.com.
- Foy, W. 1895. Altpersisches. *Zeitschrift für vergleichende Sprachforschung auf dem Gebiete der indogermanischen Sprachen* 33: 419–32.
- . 1898. Beiträge zur Erklärung der susischen Achaemenideninschriften. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 52: 119–131.
- . 1900. Altpersisches und Neu-elamisches. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 54: 341–377.
- Gershevitch, I. 1979. The Alloglottography of Old Persian. *Transactions of the Philological Society* 77: 114–190.
- Gorris, E. 2013. Remarques sur la lettre ninivite quatorze (BM 83–81–18, 307) en langue Elamite. *Le Muséon* 126: 8–15.
- Grillot-Susini, F. 1987. *Éléments de grammaire élamite*. Paris: Éditions Recherche sur les Civilisations.
- . 2008. *L'Elamite. Éléments de grammaire*, Geuthner Manuels. Paris: Librairie Orientaliste Paul Geuthner.
- Grillot, F. and Vallat, F. 1984. Dédicace de Šilhak-Inšušinak à Kiririša. *Iranica Antiqua* 19: 21–29.
- Halévy, J. 1883. *Mélanges de critique et d'histoire relatifs aux peuples sémitiques*. Paris: Maisonneuve et C^{ie}.
- Hallock, R.T. 1969. *Persepolis Fortification Tablets*, Oriental Institute Publications 92. Chicago: The University of Chicago Press.
- . 1973. On the Middle Elamite Verb. *Journal of Near Eastern Studies* 32: 148–151.
- . 1978. Selected Fortification Texts. *Cahiers de la Délégation archéologique française en Iran* 8: 109–136.

- Henkelman, W.F.M. 2003. Persians, Medes and Elamites. Acculturation in the Neo-Elamite Period. In: Lanfranchi, G.B., Roaf, M. and Rollinger, R. (eds.) *Continuity of Empire (?): Assyria, Media, Persia*. Padova: S.A.R.G.O.N., 181–231 and 407–448.
- . 2008. *The Other Gods Who Are: Studies in Elamite-Iranian Acculturation based on the Persepolis Fortification Texts*, Achaemenid History 14. Leiden: Nederlands Instituut voor het Nabije Oosten.
- Henkelman, W.F.M., Jones, C.E. and Stolper, M.W. 2006. The Qaṣr-i Abu Naṣr Tablet. ARTA 2006.003, www.achemenet.com.
- Henkelman, W.F.M. and Kuhrt, A. (eds.) forthcoming. *The Bisotūn Monument of Darius, King of Persia*, vol. 2: *Commentary, Interpretative Essays and Critical Bibliographies*, Achaemenid History. Leiden.
- Henkelman, W.F.M. et al. 2017. *The Bisotūn Monument of Darius, King of Persia*, vol. 1: *Texts, Translations and Critical Notes*, Achaemenid History. Leiden, in print.
- Hincks, E. 1848. On the Three Kinds of Persepolitan Writing, and on the Babylonian Lapidary Characters. *The Transactions of the Royal Irish Academy* 21: 233–248.
- Hinz, W. and Koch, H. 1987. *Elamisches Wörterbuch*, Archäologische Mitteilungen aus Iran, Ergänzungsband 17. Berlin: Dietrich Reimer.
- Holtzmann, A. 1851. Ueber die zweite Art der achämenidischen Keilschrift. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 5: 145–178.
- . 1852. Ueber die zweite Art der achämenidischen Keilschrift, II, III. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 6: 35–47.
- . 1854. Ueber die zweite Art der achämenidischen Keilschrift, IV. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 8: 329–345.
- Hüsing, G. 1897. *Die iranischen Eigennamen in den Achämenideninschriften*. Norden: Diedr. Soltau.
- . 1898a. *Elamische Studien* (Mitteilungen der Vorderasiatischen Gesellschaft 1898.7). Berlin: Wolf Peiser Verlag.
- . 1898b. Iteration im Elamischen. Teil I. *Orientalistische Literaturzeitung* 1: 174–176.
- . 1898c. Neu-Elamisches. *Orientalistische Literaturzeitung* 1: 301–304.
- . 1898d. Iteration im Elamischen. Teil II. *Orientalistische Literaturzeitung* 1: 384–385.
- Jensen, P. 1891. Review of Weis(s)bach 1890. *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 6: 167–182.
- Khačikjan, M. 1998. *The Elamite Language*, Documenta Asiana 4. Roma: Istituto per gli Studi Micenei ed Egeo-Anatolici.
- Koch, H. 1993. Elamisches Gilgamesh-Epos oder doch Verwaltungstäfelchen? *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 83: 219–236.
- König, F.W. 1965. *Die elamischen Königinschriften*, Archiv für Orientforschung, Beihefte 16. Graz.
- Krebernik, M. 2005. Elamisch. In: Streck, M.P. (ed.) *Sprachen des Alten Orients*. Darmstadt: Wissenschaftliche Buchgesellschaft, 159–182.
- Labat, R. 1951. Structure de la langue Elamite (état présent de la question). *Conférences de l'Institut de Linguistique de Paris* 9: 23–42.
- Lambert, M. 1974. Deux textes élamites du III^e millénaire. *Journal Asiatique* 68: 3–14.
- . 1977. Deux textes élamites de la fin du septième siècle. *Journal Asiatique* 265: 221–225.
- Lenormant, F. 1874. *Choix de textes cunéiformes inédits ou incomplètement publiés jusqu'à ce jour. Deuxième fascicule (inscriptions susiennes)*. Paris: Maisonneuve.

- Lindner, Th. 2015. *Exkurse zur Wissenschaftsgeschichte der Linguistik*, Indogermanische Grammatik IV/1, Lieferung 4. Heidelberg: Universitätsverlag WINTER.
- Löwenstern, I. 1850a. Lettre à M. de Saulcy sur la deuxième Ecriture de Persépolis. *Revue Archéologique* 6/2: 490–496.
- . 1850b. Remarques sur la deuxième Ecriture cunéiforme de Persépolis. *Revue Archéologique* 6/2: 687–728.
- Malbran-Labat, F. 1995. *Les inscriptions royales de Suse: Briques de l'époque paléo-élamite à l'empire néo-élamite*. Paris: Réunion des Musées Nationaux.
- McAlpin, D. 1981. *Proto-Elamo-Dravidian: The Evidence and its Implications*, Transactions of the American Philosophical Society 71/3. Philadelphia: The American Philosophical Society.
- McEwan, G.J.P. 1986. A Parthian Campaign Against Elymais in 77 B.C. *Iran* 24: 91–94.
- Mordtmann, A.D. 1862. Erklärung der Keilinschriften zweiter Gattung. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 16: 1–126.
- . 1870. Erklärung der Keilinschriften zweiter Gattung. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 24: 1–84.
- Norris, E. 1853. *Memoir on the Scythic Version of the Behistun Inscription*. London.
- . 1855. Memoir on the Scythic Version of the Behistun Inscription. *Journal of the Royal Asiatic Society* 15: 1–213.
- Oppert, J. 1851. *Les inscriptions des Achéménides conçues dans l'idiome des anciens Perses*. Paris: Imprimerie Nationale.
- . 1879. *Le peuple et la langue des Mèdes*. Paris: Maisonneuve.
- Paper, H.H. 1954. Note préliminaire sur la date des trois tablettes élamites de Suse. In: Ghirshman, R., *Village perse-achéménide*, Mémoires de la Mission Archéologique en Iran 36. Paris: Presses Universitaires de France, 79–82 and Pl. XXIV.
- . 1955. *The Phonology and Morphology of Royal Achaemenid Elamite*. Ann Arbor: The University of Michigan Press.
- Quintana Cifuentes, E. 2010. *La lengua elamita (Irán pre-persa)*. Murcia: GRAM Ediciones.
- . 2013. *Gramática de la Lengua elamita*. Madrid: Vision Libros.
- Rawlinson, H.C. 1846. Memoir on Cuneiform Inscriptions. *Journal of the Royal Asiatic Society* 10: 1–52.
- Reiner, E. 1969. The Elamite Language. In: *Altkleinasiatische Sprachen* (Handbuch der Orientalistik, Abteilung 1, Band 2, Abschnitt 1–2, Lieferung 2). Leiden – Köln: E.J. Brill, 54–118.
- Rezayi-Sadr, H. 2015. Ein neuelamischer Brief geschrieben auf einem Keramikfragment gefunden in *Marbacheh* bei Ramhormoz (Iran). *Elamica* 5: 53–57.
- Roche, C. 2012. Briques élamites du II^e millénaire av. J.-C. conservées aux Musées royaux d'Art et d'Histoire de Bruxelles. *Bulletin des Musées royaux d'Art et d'Histoire – Bulletin van de Koninklijke Musea voor Kunst en Geschiedenis* 83: 17–72 (with a note by B. Overlaet on the origin of the Elamite brick collection, 48–51).
- Saulcy, F. de 1849. Recherches analytiques sur les Inscriptions cunéiformes du système médique. *Journal Asiatique*, IVe série 14: 93–213.
- . 1850. Recherches analytiques sur les Inscriptions cunéiformes du système médique. Deuxième mémoire. *Journal Asiatique*, IVe série 15: 397–528.
- Sayce, A.H. 1874. The Languages of the Cuneiform Inscriptions of Elam and Media. *Transactions of the Society for Biblical Archaeology* 3: 465–485.

- . 1885. The Inscriptions of Mal-Amir and the Language of the second Column of the Akhæmenian Inscriptions, *Actes du VI^{ème} Congrès international des Orientalistes, tenu en 1883 à Leide, 2^{ème} Partie, Section I: Sémitique*. Leiden: E.J. Brill, 637–756.
- . 1890. Amardian or ‘Protomedic’ Tablets in the British Museum. *Recueil de Travaux relatifs à la philology et à l’archéologie égyptiennes et assyriennes* 13: 126–131.
- Scheil, V. 1907. *Textes élamites-anzanites. Troisième série*, Délégation en Perse, Mémoires 9. Paris: Ernest Leroux, éditeur.
- . 1911. *Textes élamites-anzanites. Quatrième série*, Délégation en Perse, Mémoires 11. Paris: Ernest Leroux, éditeur.
- . 1928. Sparsim. *Revue d’Assyriologie et d’archéologie orientale* 25: 37–49.
- Sollberger, E. 1965. A New Inscription of Šilhak-Inšušinak. *Journal of Cuneiform Studies* 19: 31–32.
- Spiegel, F. 1881. *Die altpersischen Keilinschriften im Grundtexte mit Übersetzung, Grammatik und Glossar*, 2nd ed. Leipzig: W. Engelmann.
- Steve, M.-J. 1967. *Tchoga Zanbil (Dur-Untash)*, vol. III: *Textes élamites et accadiens de Tchoga Zanbil*, Mémoires de la Délégation Archéologique en Iran 41. Paris: Librairie Orientaliste Paul Geuthner.
- . 1992. *Syllabaire Elamite: histoire and paléographie*, Civilisations du Proche Orient, Série 2, Philologie 1. Neuchâtel – Paris: Recherches et Publications.
- Steve, M.-J. and Vallat, F. 1989. La dynastie des Igihalkides: nouvelles interprétations. In: De Meyer, L. and Haerinck, E. (eds.) *Archæologia Iranica et Orientalis. Miscellanea in Honorem Louis Vanden Berghe*. Ghent, 221–238.
- Stolper, M.W. 1984. *Texts from Tall-i Malyan I. Elamite Administrative Texts (1972–1974)*, Occasional Publications of the Babylonian Fund 6. Philadelphia: Babylonian Fund of the University Museum.
- . 2004. Elamite. In: Woodard, R.D. (ed.) *The Cambridge Encyclopedia of the World’s Ancient Languages*. Cambridge: Cambridge University Press, 60–94.
- . 2014. Middle Elamite Royal Inscriptions. In: Spar, I. and Jursa, M. (eds.) *The Ebabbar Temple Archive and Other Texts from the Fourth to the First Millennium B.C.* (Cuneiform Texts in the Metropolitan Museum of Art 4). New York – Winona Lake, IN: The Metropolitan Museum of Art and Eisenbrauns, 235–238.
- Stolper, M.W. and Wright, H.T. 1990. Elamite Brick Fragments from Chogha Pahn East and Related Fragments. In: Vallat, F. (ed.) *Contribution à l’histoire de l’Iran. Mélanges offerts à Jean Perrot*. Paris: Recherche sur les civilisations, 151–163.
- Strassmaier, A.N. 1885. Beigabe zur Abhandlung von H. Prof. Sayce, Oxford. *Actes du VI^{ème} Congrès international des Orientalistes, tenu en 1883 à Leide, 2^{ème} Partie, Section I: Sémitique*. Leiden: E.J. Brill, 754–755.
- Tavernier, J. 2007. On Some Elamite Signs and Sounds. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 157: 265–291.
- . 2008. Multilingualism in the Fortification and Treasury Archives. In: Briant, P., Henkelman, W.M.F. and Stolper, M.W. (eds.) *L’archive des Fortifications de Persépolis. État des questions et perspectives de recherches* (Persika 12). Paris: Éditions de Boccard, 59–86.
- . 2010. Migration des savoirs entre l’Élam and la Mésopotamie. *Res Antiquae* 7: 199–222.
- . 2011. Elamite: analyse grammaticale et lecture de textes. *Res Antiquae* 8: 315–350.
- . 2014. What’s in a Name: Hallušu, Hallutaš or Hallutuš? *Revue d’Assyriologie et d’Archéologie orientale* 108: 61–66.
- Vallat, F. 1977. *Corpus des inscriptions royales en élamite achéménide*, PhD Diss., Paris.

- . 1981. L'inscription de la stèle d'Untash-Napirisha. *Iranica Antiqua* 16: 27–33.
- . 1983. Les briques élamites de Deylam. In: Koch, H. and MacKenzie, D.N. (eds.) *Kunst, Kultur und Geschichte der Achämenidenzeit und ihr Fortleben*, Archäologische Mitteilungen aus Iran, Ergänzungsband 10. Berlin: Detrich Reimer Verlag, 11–18 and Pl. 1.
- . 1997. La lettre élamite d'Arménie. *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 87: 258–270.
- . 2011. Textes historiques élamites et achéménides. In: George, A.R. (ed.) *Cuneiform Royal Inscriptions and Related Texts in the Schøyen Collection*, Cornell University Studies in Assyriology and Sumerology 17. Bethesda, Maryland: CDL Press, 187–192 and Pls. LXXIII–LXXVII.
- Van Dijk, J. 1982. Fremdsprachige Beschwörungstexte in der südmesopotamischen literarischen Überlieferung. In: Nissen, H.-J. and Renger, J. (eds.) *Mesopotamien und seine Nachbarn. Politische und kulturelle Wechselbeziehungen im Alten Vorderasien vom 4. Bis 1. Jahrtausend v. Chr.*, Berliner Beiträge zum Vorderen Orient 1. Berlin: Dietrich Reimer, 97–110.
- Van Dijk, J., Goetze, A. and Hussey, M.I. 1985. *Early Mesopotamian Incantations and Rituals*, Yale Oriental Series, Babylonian Texts 11. New Haven – London: Yale University Press.
- Walker, C.B.F. 1981. *Cuneiform Brick Inscriptions in the British Museum, the Ashmolean Museum, Oxford, the City of Birmingham Museums and Art Gallery, the City of Bristol Museum and Art Gallery*. London: Trustees of the British Museum.
- Weisbach [= Weissbach], F.H. 1890. *Die Achämenideninschriften zweiter Art*, Assyriologische Bibliothek 9. Leipzig: J.C. Hinrichs'sche Buchhandlung.
- Weissbach, F.H. 1894. *Neue Beiträge zur Kunde der susischen Inschriften* (Abhandlungen der Königlich Sächsischen Gesellschaft der Wissenschaften 34, Phil.-hist. Klasse 14/7). Leipzig: S. Hirzel.
- . 1902. Susische Thontäfelchen. *Beiträge zur Assyriologie und semitischen Sprachwissenschaft* 4: 168–201.
- . 1911. *Die Keilinschriften der Achämeniden*, Vorderasiatische Bibliothek 3. Leipzig: J.C. Hinrichs'sche Buchhandlung.
- Westergaard, N.L. 1844. On the Deciphering of the second Achaemenian or Median species of arrowheaded writing. *Mémoires de la Société royale des Antiquaires du Nord* (1840–1844): 271–439.
- . 1845. Zur Entzifferung der achämenidischen Keilschrift zweiter Gattung. *Wiener Zeitschrift für die Kunde des Morgenlandes* 6/2: 337–466.
- . 1854. *Om den anden eller den sakiske art af Akhæmenidernes kileskrift*. Kjöbenhavn: Bianco Lunos Bogtrykkeri.
- Winckler, H. 1896. Die sprache der zweiten columne der dreisprachigen Inschriften und das altaische. In: Müller, C.F.W. (ed.) *Programm des städtischen Johannes-Gymnasiums zu Breslau für das Schuljahr von Ostern 1895 bis Ostern 1896*. Breslau: Grass, Barth u. Comp., 1–32.

CHAPTER TWENTY-TWO

Writing in Elam



*Jean-Jacques Glassner**

Writing is an artifact created by man, the only animal to make use of it, and as the product of culture it needs to be taught. At its core, writing requires a concept, which means that a pre- or proto-writing could not have existed. Writing was invented four times in different geographic areas, in Sumer, Egypt, China and Mesoamerica. According to our current state of knowledge, it was in the land of Sumer that the first writing saw light of day in the 34th century BC. These four writing systems had in common that each of their signs had multiple values, which translated words or syllables. They were mixed systems.

The invention of writing was a major cultural phenomenon, even if its true scope escapes us. It was not the fruit of a lonely and wild imagination, but the conscious and deliberate effort of a society to build a coherent, meaningful system. Writing presupposes an intense conceptual activity, the very condition of its existence, and its inventors were aware that it would be in danger of disappearing if it was not taught.

Proto-Elamite writing

The times and places

The Banesh culture that flourished in Iran between 3400 and 2300–2200 BC was named after a village situated in the Kor basin about ten kilometers north of the most important city, Tall-e Malyan/Anshan. Its people engaged in the intensive cultivation of cereals and reared small livestock. Here at around 3300 an original form of writing known as proto-Elamite was invented. Since the script remains undeciphered and the language it conveyed unknown, however, it is not presently justifiable to use this term, which refers to the Elamite culture that later expanded in the same geographical area.

If one follows the recent findings of Naomi Miller and William Sumner (2004: 79–89), the Banesh culture was not extinguished between 2900–2800 as believed until recently, but lasted

almost until the Kaftari succeeded it at around 2200. There is no reason for proto-Elamite writing to have been abandoned prior to this date. This perhaps permits us to interpret a writing sign discovered on a seal from Ra's al-Jinz in Oman (ancient Magan) as an imitation of a proto-Elamite sign (Glassner 1999).



[Figure 22.1 Seal from Oman; proto-Elamite sign m453.](#)

The most accurate chronological data are offered by archaeological excavations carried out at Susa and Tall-e Malyan. Writing made its appearance at Susa in the archaeological level 17B of the Acropolis, and its last attestation was in level 14B. The Tappeh Sialk tablets are contemporary with the oldest tablets from Susa (level 17B), at the turning point of the Uruk IV and III, while those of Tall-e Malyan and Shahr-e Sokhta are the most recent tablets (Susa levels 15A-14B) (Dahl, Petrie and Potts 2013: 370, Figure 18.17). There is nothing to contradict the hypothesis that proto-Elamite writing continued beyond this date.

This first writing appeared shortly after the invention of writing in Mesopotamia, possibly as early as Uruk IV, and evidence of this is spread throughout the Iranian plateau and its immediate surroundings: Susa (around 1600 tablets), Tal-e Gazir (1 tablet), Tal-e Malyan (32 tablets), Tappeh Sialk (7 tablets), Tepe Ozbaki (1 tablet), Tepe Yahya (26 tablets), Shahr-e Sokhta (1 tablet) and Tepe Sofalin (numerous tablets of which 12 are published).

Notwithstanding the extent of the envisaged geographic area, it would be premature to think that Iran at that time formed a unique and homogeneous cultural space. The city of Susa, for example, a border town rich in contacts, had previously been a part of the cultural area of Uruk and was still subject to its influence as indicated by the persistence of the use of cylinder seals in place of stamp seals, as was the case in Tall-e Malyan. Writing was certainly the tool used by scribes to communicate amongst themselves in a written language that was not necessarily the same as that or those which were spoken.

Language

One piece of evidence that could plead in favour of Elamite as the language represented by

proto-Elamite is the presence of two divine names, lugal-Aratta (LAM×KUR-RU) and lugal-Elam (written lugal-NIM, the usual logogram for designating Elam in Mesopotamia), in a list of Sumerian gods of the 26th century; they slightly precede that of the Inshushinak (NIN-MÛŠ-ERIN), the god of Susa (Mander 1986: 7 and 25, nos. 62–63 and 71). This document shows that from this time the Sumerians designated their Iranian neighbour with the help of the sign NIM, which was perhaps read as Elam.

For Robert Englund and Jacob Dahl, the proto-Elamite documents could have reproduced an administrative syntax but not the spoken language. We now know that writing was never used to reproduce the spoken language, and it has a syntax of its own. It is another way of using words. In reality, these two authors emphasise the fact that these texts were not detailed presentations of sequences of facts, in short, not narrative compositions. In these texts there was neither temporality nor plot, and the temptation of a reading of a narratological type misses its purpose. These documents have all the appearance of texts that oral language could not have produced, the texts that are characterised by their nuclear writing, a structure that gives them a rigid appearance, the expression of silent ceremonials. However, and as these two authors recognised, even if we ignore their semantic value, the signs speak of the names of numbers, of accounting units, and of quantifying goods as well as agents at work.

The corpus: the Urukean influence

The corpus consisted of about 1,200 to 1,400 graphs, including 17 numeral signs; but it is very probably necessary to reduce this number, as variants of the same sign can be numerous. It was inspired by the Mesopotamian model and several features militate in favour of this thesis:

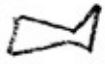
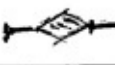
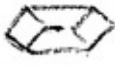
- the notations of the numbers were identical and the accounting procedures were of sexagesimal and bi-sexagesimal types;
- a certain number of signs of the proto-Elamite corpus were identical to those of the Urukean writing. Here are some examples ([Figure 22.2](#)):

Without doubt one can only note here the formal resemblances of the signs without knowing their semantic values in proto-Elamite, which weakens the argument. We observe, however, several significant points:

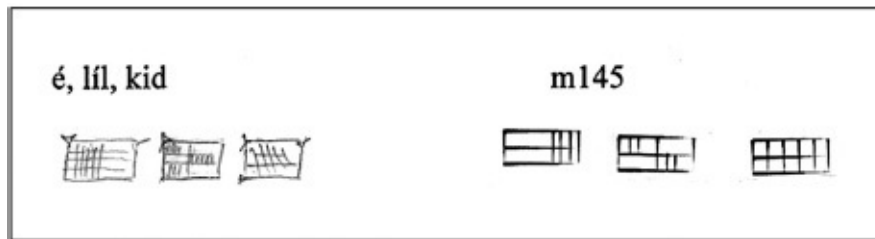
- The proto-Elamite sign m145 reproduces identically the graphic variants of the Urukean sign é, lîl, kid ([Figure 22.3](#));
- There are at least two examples where the values of the signs are conjoined: the proto-Elamite signs representing wines and goats are the same as those of Uruk ([Figure 22.4](#)).

On the other hand, the Iranians were not content to make indivisible primitive signs, they manipulated them to obtain derived signs using the same procedures as the Urukeans (Glassner 2003: Chapter 7): two signs are designed to mirror each other; the doubling, tripling or quadrupling of a sign; the juxtaposition of different signs; the interweaving of different signs; the addition of graphic modifiers like hatches or entangled marks; the creation of a matrix with sub-scripts. In this way they produced families of signs.

The borrowing was therefore not confined, as presumed by R. Englund and J. Dahl, to only the notation of numbers, because relations between Iran and Mesopotamia were not interrupted after the Uruk IV period when Susa fell again into the Iranian cultural lap.

Urukean Characters	Proto-Elamite Characters
 , AN _____ m046,	
 , DU _____ m054,	
 , APIN _____ m056,	
 , UB _____ m102,	
 , TÜR _____ m127,	
 , NI _____ m131,	
 , LUM _____ m205,	
 , Ú _____ m206,	
 , ŠIR _____ m254,	
 , GÚ _____ m295,	
 , BANŠUR _____ m302,	
 , TUR _____ m370,	
 , SUKKAL _____ m383 et 382,	
 , GUM _____ m447,	

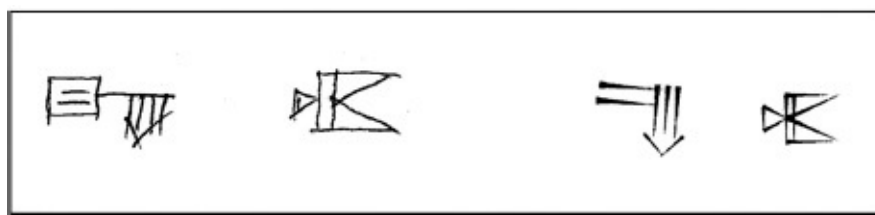
[Figure 22.2 Comparison between Urukian and proto-Elamite signs.](#)



[Figure 22.3 The Urukian sign é, líl, and kid; the proto-Elamite sign m145.](#)



[Figure 22.4 The signs maš and udu; and the signs m006, m006a, and m197.](#)



[Figure 22.5 The signs kalam and gan; the signs m206 and m217.](#)

An important indication of contact between Mesopotamia and Iran is the site of Godin Tepe near the Kangavar Valley, consequently outside of the Uruk cultural area and dated to the Uruk IV period: the texts which were discovered there were limited to numeral notations, except for one sign which undoubtedly represented a commodity. All written signs found there were of the Mesopotamian type. The carriers of the Uruk culture were concentrated within a limited oval area delimited by a wall pierced by a single gate in the middle of an indigenous habitat. Thus a contamination was possible. But the relationships within Mesopotamia did not stop in this period: some variants of proto-Elamite signs were derived from signs of the Djemdet-Nasr era ([Figure 22.5](#)).

The corpus: an original system

Notwithstanding what has been said, the proto-Elamite system reveals a significant adaptation (Englund 2004).¹ It presents a high degree of autonomy from the Urukian system and attests to a great originality. This is demonstrated by the presence of a decimal-based accounting system, unknown in Mesopotamia; also by the fact that the vast majority of signs present

great differences from the Urukian signs; finally by the fact that the signs, unlike at Uruk, were generally distributed over the surface of the medium without separation by lines or boxes.

The corpus: a mixed writing

This was a mixed logo-syllabic writing, the scribe having the choice to write the words by means of logograms or syllabograms. One can assume that the long sequences of graphemes corresponded to a syllabic writing.²

The function of writing

Proto-Elamite writing, finally, was a system whose ambition was restrained; it recorded only documents of an administrative nature, accounts of herd management, man power, grain production, perhaps some surface measurements.³ Statements were subdivided into three registers: headers; individual entries with the quantification of items, names of items and names of agents; and totals.

The scribes understood, like their Urukian colleagues, that their invention would be threatened with extinction if it was not taught and learnt. Fortunately, at least two school texts have survived (MDP 17 328 and MDP 26 362: Friberg 1978–1979).

Linear Elamite writing

Times and places

After the disappearance of proto-Elamite during the Akkadian period (2300–2100), the Susiana was reintegrated into the sphere of influence of Mesopotamia, where Old Akkadian cuneiform writing was in use. A treaty in Elamite between a king of Elam and Naram-Sin has been preserved for us in an Old Babylonian copy.

But a new Iranian writing, the so-called linear Elamite, appeared at roughly the same time. It was in use only for a short duration, disappearing at the end of the 20th century.

We have at our disposal only a total of 30 examples, of which 26 are incontestable. They are spread throughout the Iranian plateau, from Susa to Shahdad and Gonur Depe, passing through the vicinity of Persepolis and perhaps Konar Sandal. A last document, a stamp seal, originates from Dilmun. Several of these, mostly silver vessels, are of unknown origin.⁴ Essentially these were documents for display; official inscriptions in stone, on silver vessels or on stamp seals. More modest was the ceramic vase from Gonur, a jar from Shahdad and two

tablets from Susa. No direct borrowing from one type of writing to the other can be perceived.

The partially bilingual inscriptions coming from Susa place linear Elamite in relation with the name of an Elamite king, Puzur-Inshushinak, who bequeathed to posterity texts in Akkadian cuneiform writing and texts in linear writing. In the Akkadian sources he sometimes calls himself “*ensi* of Susa”, “*ensi* of Susa and *shakkanakku* of Elam”, and finally, the god Inshushinak having offered him the rule over the four banks of the world, “the strong, king of Awan”. It is thought that he was originally from Susa, that he monopolised power in Elam whose capital was then Anshan/Tall-e Malyan, and that he conquered Awan, a toponym not yet located geographically, as well as numerous cities and countries. He placed emphasis on the submission of a king of Simashki. In short, he was a conqueror and a legislator (Gelb and Kienast 1990: 321–324, Puzur-Inšušinak 1). But his conquests were useless, since Ur-Namma of Ur quickly seized the cities and countries that he had taken by force (Wilcke 1987: 108–111). His kingdom was therefore situated at the end of the 22nd or early 21st century.

The simultaneous use of two writings, one Akkadian and one Iranian by Puzur-Insusinak, at least at Susa (a city situated on the frontier separating Mesopotamia and Iran, and influenced by both cultures), suggests that he made official use of two languages, Akkadian and an unknown language, and of two writings.

His royal name at least offers us an indication of the period when this writing was in use, since the majority of texts are difficult to date with any accuracy. It can be estimated, however, that the usage of this writing corresponds with the peak of the Kaftari culture native to the Kor River basin in Fars, which is characterised by distinctive ceramic assemblages, documented in Anshan/Tall-e Malyan between 2100 and 1900, and exported as far as the Persian Gulf at this same date.

Was this king the instigator of this writing, urging his scholars to invent a new system? In this case, would its appearance date to the end of the 22nd century? We cannot confirm this with certainty. How could its diffusion from Dilmun on the west coast of the Persian Gulf to Gonur in Margiana be explained? Its use on a Dilmun stamp seal may indicate the opposite. Dilmun was located to the north of the Arabian Peninsula where a Semitic language different from Akkadian was spoken. Its merchants were very active in Iran and we can stipulate that one of them, trading on the Iranian plateau, chose to write his name or his title using the writing of the country where he conducted his activities; this clearly exceeds the narrow framework of a courtly writing. There exist other examples of such seals, but with Harappan writing. A second seal from Dilmun, with its characteristic reverse of a central boss with three lines and four incised circles with dots, bears eight Harappan signs. Must it be concluded that we are in the presence of a Harappan merchant established permanently in the Gulf, or does the parallel with linear Elamite encourage the view that this was a local merchant who adopted the writing of the Indus; the country in which he traded? A stamp seal in steatite with

a Harappan inscription, although discovered in Lothal, was a characteristic product of Magan, today Oman: on the reverse can be noted the presence of two dotted concentric circles typical of the production of workshops of Magan, where it was the procedure to manufacture seals from recycled steatite vase fragments; the inscription is a late addition achieved with a pointed metal tool, which may well have been made in India (Glassner 2002: 362, 366–367).

The writing of the Indus

The urban Indus civilisation reached its apogee between 2500 and 1900 BCE. Writing appeared there during the second half of the 3rd millennium, although a precise date cannot be established. It is known mostly by inscriptions on stamp seals, on tablets, graffiti on pottery, on a single limestone and ten monumental gypsum graphs inlaid in a wooden lintel (Kenoyer 1998; Possehl 2004: 70). It was in all likelihood a mixed system of a corpus of several hundred signs (Parpola 2011: 162; Koskeniemi, Parpola and Parpola 1979: xxii–xxvi; Koskeniemi and Parpola 1982: 20–21).

The great world commerce

Around 1900 the writing of the Indus disappeared with the collapse of this civilisation, in company with linear Elamite writing. Were their fates related? One could suppose that Elamite writing had the same life as that of the Indus, that it pre-dated the reign of Puzur-Inshushinak who used it in his own inscriptions and contributed to its spread.

The vases in silver represent a large portion of the carriers of this writing. Daniel T. Potts (2008: 165–194) shows convincingly that those discovered in Persepolis and Gonur (only the first bears an inscription in linear writing) were of identical workmanship (they share a frieze on the neck of the vase, a kind of evocation of mountainous scenery) and the decoration of the second, two Bactrian camels, points to this region as the place of production; the text of the first could have been inscribed at a later date.

It should be recalled that Puzur-Inshushinak boasted of having received the submission of a king of Shimashki. Later Shū-Sîn of Ur led an expedition against this country and would underline in his account the silver and gold booty he brought back, and on the reduction to servitude of prisoners who he made work in the silver mines he had discovered in Zabshali, a province of Simashki. He stated that the country stretched from the border of Anshan to the Caspian Sea (RIME 3/2, Šū-Sîn E3/2.1.4.3).

The precious metal came, therefore, from Simashki, and it is in this kingdom that the silver artifacts were manufactured. The presence of Bactrian camels hints at an extension of Simashki up to Margiana. Piotr Steinkeller suggests that the king Yabrat of Simashki could have brought camels from this country as diplomatic gifts to Shulgi (Steinkeller 2009: 415–419,

followed by Potts 2008: 190). As a parallel hypothesis, the wars of Puzur-Inshushinak, Ur-Namma and Shū-Sîn against Simashki would not have had the trivial objective of conquering a neighbor but rather the taking of control of the silk route that ran along the southern shore of the Caspian Sea.

Language

Some bilingual inscriptions from Susa are probably only partially bilingual and thus indirectly useful for the comprehension of the language written in linear writing. Attempts to understand the language were made long ago by Walther Hinz and Piero Meriggi, but without convincing the scientific community (Hinz 1969: 11–44; Meriggi 1971: 184–224, Pls. I–IV). Their study, however, allows a number proposals concerning the writing of the royal name to be made with relative certainty. Two spellings of the name can be found:

X-ti-r-nap-in-šu-ši-na-k

X-ti-r-nap-in-šu-uš-na-k

Two different signs are used to write the final k, where we are in the presence of an allograph. The first sign is formed by two semicircles facing each other; if the hypothesis is true, it would read KU. The royal name would be an Elamite name, Kutir-Inshushinak, and not Kutik-Inshushinak as is often proposed. The language of linear writing would therefore, as expected, be Elamite.

The corpus

We do not know the total number of signs comprising this writing, the examples of it being too few. These are official texts on architectural mediums and silver vessels, sometimes accompanied by versions in Akkadian. These latter Akkadian versions which mention the name of king Puzur-Inshushinak are not perfectly bilingual. Other texts appear more modestly on clay tablets, not made for display; they are composed only of signs unattested elsewhere. Graphic variations perhaps attest to different geographical localities or times, or a writing that was not stabilised.

According to Jacob Dahl (2009), linear writing was not a true writing and, therefore, it will never be deciphered!

The adoption of Mesopotamian cuneiform writing

The times and places

From the Akkadian period (2300–2100 BCE), Mesopotamian cuneiform writing was adopted in Elam to record the official language that would be imposed during the Middle-Elamite period (1500–1100), and it would remain in use until the Achaemenid period. From this time, scholars were ambitious to record every expression of thought. During this long period, this writing evolved from a structure based on nominal groups introduced by anaphoric pronouns to a structure oriented towards the verb, with the gradual disappearance of the old nominal structure (Grillot 2008).

In fact, only offices of the scribes from Susiana (Susa, Haft Tappeh, Abu Fandowa, Tepe Sharafabad) and Anshan/Tall-e Malyan, and later Persepolis, adopted cuneiform writing. The oldest known document comes from Susa: the Old Babylonian period copy of a treaty concluded between Naram-Sin of Akkad and a king of Elam (MDP 11 88; EKI 2). However, even if documents of all kinds gradually made their appearance, literature was never put in writing, except in the form of citations in royal inscriptions.⁵

Schools

It is impossible to imagine the presence of writing without the presence of schools. Numerous school tablets were discovered at Susa and also in smaller quantities at Haft Tappeh/Kabnak, Abu Fandowa (Herrero and Glassner 1996: 75–82) and perhaps in Anshan/Tall-e Malyan. Amongst these documents, it is true, only two seem to have been written in Elamite. Besides the Malyan tablet, a source from Ur III Susa is in Elamite (De Graef 2006: no. 82). The case of this city merits attention. The presence of scholarly texts from the Old Akkadian period testifies to the transfer of Mesopotamian culture. Rene Labat (1974: 4–7) has highlighted the particular uses that scribes at the beginning of the Middle-Babylonian/Middle-Elamite period (towards 1500) made of the Mesopotamian syllabary. He highlights some confusion between the unvoiced and the voiced, including in the Babylonian language texts, as indicated by the use of the sign DU in place of TU, to say *erēbu*, “to enter”; the Elamitophone scribes did not necessarily distinguish between the unvoiced and voiced. We can equally think of the use of akkadograms to play homophony between Akkadian words: for example, DAGAL to say *rapaštu* “shoulder” while the logogram refers to the homonym *rapaštu* “large”. These examples are particular to the Susiana schools in the wake of the Babylonian tradition and their singularities tend to show that two schools, one Babylonian, one Elamite, did not exist in Elam, but that apprentice scribes attended the same schools (D’Erme 1990: 80–81).

The question of bilingualism

From the outset up until the bilingual inscriptions of Untash-Napirisha, the kings of Elam

expressed themselves in two languages, principally in Susiana. Undoubtedly, the two versions present variants, such as the use of logograms exclusively in the Akkadian versions, versus the use of syllabic writings privileged in the Elamite versions, or certain specific phonetic values such as the Akkadian sign ù against the Elamite ú. But in the Babylonian versions we also observe syntax errors, the use of fossilised logograms such as DUMU.NI instead of DUMU, or the occurrence of elamisms. Conversely, in a Babylonian inscription on a brick fragment from Tall-e Malyan, the Elamite word *siyan* “temple” appears, complemented with the Babylonian accusative ending *-am*. These are all traits that show the texts were works of bilingual Elamitophone scribes (Vallat 2008: 76; Labat 1970; Stolper 1982: 61).

The syllabary

Once these borrowings were complete, the Elamite syllabary was not content to be a slavish copy of its model (Stève 1992). Its elaboration must have taken place between the 18th and 15th centuries, and it was finalised by around 1400 with the kings of Anshan and Susa. It is necessary to imagine that there had existed lexical lists that served to compose these syllabaries, which are for the time being lost.

The borrowing had been made from a universe whose languages had only a distant relation with Elamite. As a result, the graphic signs do not necessarily correspond to the phonemes or to the vocal articulations that must have constituted the Elamite linguistic system. But this is not the objective of a writing. In any case, broken writings such as *mi-ul*, attempted to render Elamite sounds. At a later period, we also find phonetic complements of the type *-iš* to indicate that the sign TUK was to be read as *raš*, or *-ir* to indicate that *mar* was to be read as *mir* and so on.

Over time, the system evolved:

- The form of the signs slowly mutated, notably towards their simplification, with a marked predilection for the horizontal and vertical wedges at the expense of the oblique; in the case of PA, the horizontal signs were placed after the vertical sign. There can be noted a rapprochement with the Assyrian system from the 12th century;
- The number of signs and syllabic values was more limited than in the Mesopotamian system (depending on the period, between 156 and 130 signs); homophony and polyphony were restrained;
- The presence of logograms, initially minimised like the Old Babylonian corpus, would be amplified; during the Achaemenid period their number would outweigh that of the syllabic signs;
- The use of akkadogrammes, like in Hittite, behind which are found Elamite words; such as *ZA-AL-MU* “statue”, or *A-NA-KU* “tin”, sometimes followed by the sign *MEŠ* to

indicate the presence of a (pseudo-)logogram (Stolper 1984a: 22–23).

Undoubtedly, the evolution of the syllabary was not linear but followed an uneven rhythm; the later system was not the simplest. A Neo-Babylonian tablet from Persepolis illustrates the differences between the Babylonian syllabary and the Elamite at the time of Darius I (Stolper 1984b: 299–309).

Epilogue: Old Persian writing

Everything, or almost everything, has been said about Old Persian writing since David Diringer and Ignace J. Gelb (Gelb 1963; Diringer 1968; Cohen 1976; Mayrhofer 1979; D’Erme 1983; Lecoq 1974; Herrenschildt 1990; Mancini 1984; 1992). Some authors, like Ignace Gelb or Rüdiger Schmitt (2008: 76), consider it a courtly writing created under the authority of the Achaemenid king. The discovery of an administrative tablet in Old Persian at Persepolis raises questions about the relevance of this statement (Stolper and Tavernier 2007).

The corpus was composed only of 45 signs of simplified forms in comparison to the Babylonian syllabary. Logograms excepted, no sign was composed of more than five elements. It can be divided as follows:

- eight logograms;
- 36 signs which constituted an alpha-syllabary, a corpus situated midway between a syllabary and an alphabet: syllables provided with a vowel by default and signs suppressing this vowel by default. They can be subdivided into four categories:
 - three graphemes expressing the vowels a, i and u;
 - 22 graphemes with a consonant value;
 - seven allographs (alternative forms permitting the writing of the same sound) of u;
 - four allographs of i.
- a separator of words.

One perceives that the first 25 graphs of the alpha-syllabary could have sufficed to record the language. In addition, the system of allographs was incomplete; it permitted distinguishing the syllables *di* and *dai*, but did not allow for the nominative (*tiš*) and the genitive (*taiš*). The use of diphthongs was as imprecise as it was in Elamite. Among the logograms, there were three to write the name of Ahuramazda, and two for writing the word “country”. These inconsistencies resist any attempt at explanation.

The Achaemenid corpus was an original system and the Akkadian syllabary could not serve as its model. The only sign that might be borrowed is la, since the phoneme 1 does not exist in Old Persian language. There is only one obvious link between the two systems: Old Persian

was written in cuneiform.

Strangely, the Achaemenid scribes did not adopt the Aramaic alphabet – which they nevertheless made significant use of – probably due to the prestige of the cuneiform. The success of this alphabet had to wait until the Parthian and Sassanid eras, when the Aramaic language gave way to the Middle-Iranian languages. However, these languages made an unexpected use of the Aramaic alphabet. Groups of consonants forming Semitic words were considered logograms read in the Iranian language, such as: MNŠ “out of”, a preposition, a borrowing from Aramaic MN augmented by the Š, the Iranian word pronounced /hač/; AMY signifying “mother” and not “my mother” (‘m-y) and read as /mād/; MLKAn “kings” with the plural ending *n*, and read as /šāhān/. The adoption of the alphabet was never a simple affair!

Some evoke the hypothesis of a Mediterranean, Mycenaean or Cypriot origin for the Achaemenid alpha-syllabary, the allographs being the descendants, but this theory is fraught with insoluble problems, notably the dates. How could we forget here that, in the most ancient Greek inscriptions, the vowel of a syllable could not be recorded in writing if it had the same vocalic quality as that which in the oral alphabet allowed the articulation of the consonant (Wachter 1991: 48–80)?

In short, there is no known model which inspired the inventors of Old Persian writing. The place of the Elamite, however, seems to have been neglected. The Old Persian *b* may be derived from the Akkadian *ba* through the intermediary of Elamite forms; the Old Persian *č* from the Elamite *sa*; the Old Persian *nu* from a duplicated Elamite /*nu*/.

Abbreviations

EKI	Inscriptions in König 1965.
MDP	11 Texts in Scheil 1911.
MDP	17 Texts in Scheil 1923.
MDP	26 Texts in Scheil 1935.
RIME	2/3 Inscriptions in Frayne 1997.

Notes

* Translated from French by Javier Álvarez-Mon and Yasmina Wicks.

¹ The corpus of signs was drawn up by J. Dahl and can be found on the CDLI site (<http://cdli.ucla.edu/>).

² In a completely intuitive manner, Dahl, Petrie & Potts (2013: 370) guess that the syllabary developed over time to the detriment of logographic writing.

³ The only sure document is MDP 26 5224, which is of a Urukian type rather than proto-Elamite.

⁴ A convenient table has been compiled by Desset (2012: 92) which must be corrected: document V is a seal of the Gulf

and not of the Indus.

[5](#) The Elamite version of Gilgamesh was revealed to be a private letter (Koch 1993: 219–236).

Bibliography

- Cohen, G. 1976. Origin of Persian Cuneiform. *Comments on Etymology* 6/5–6: 1–11.
- Dahl, J.L. 2009. Early Writing in Iran, a Reappraisal. *Iran* 47: 23–31.
- Dahl, J.L., Petrie, C.A. and Potts, D.T. 2013. Chronological Parameters of the Earliest Writing System in Iran. In: Petrie, C.A. (ed.) *Ancient Iran & Its Neighbours*. Oxford: Oxbow Books, 353–378.
- De Graef, K. 2006. *De la dynastie Simaški au Sukkalmaḫat. Les documents fin PE IIB – début PE III du chantier B à Suse*, Mémoires de la Délégation Archéologique en Iran 55. Gent: Université de Gand.
- D’Erme, G. 1983. Aspetti grafici e fonetici della scrittura antico-persiana. *Annali [dell’Istituto Universitario Orientale]* 43: 429–477.
- . 1990. Elamico e antico-persiano: affinità stilistiche tra i due sistemi scrittori. In: Gnoli, Gh. and Panaino, A.C.D. (eds.) *Proceedings of the First European Conference of Iranian Studies*, vol. 1. Rome, 69–83.
- Desset, F. 2012. *Premières écritures iraniennes. Les systèmes proto-élamite et élamite linéaire*, Series Minor 76. Napoli: Università degli Studi di Napoli “L’Orientale”.
- Diringer, D. 1968. *The Alphabet* (3rd edition). New York: Hutchinson and Co.
- Englund, R.K. 2004. The state of decipherment of Proto-Elamite. In: Houston, S.D. (ed.) *The First Writing. Script Invention as History and Process*. Cambridge: University Press.
- Frayne, D. 1997. *Ur III Period (2112–2004 BC)*, The Royal Inscriptions of Mesopotamia, Early Periods 3/2. Toronto, Buffalo, London: University of Toronto Press.
- Friberg, J. 1978–1979. *The Third Millennium Roots of Babylonian Mathematics* I. Department of Mathematics, Chalmers University of Technology and the University of Göteborg.
- Gelb, I.J. 1963. *A Study of Writing* (revised edition). Chicago: The University of Chicago Press.
- Gelb, I.J. and Kienast, B. 1990. *Die altakkadischen Königsinschriften des dritten Jahrtausends v. Chr.*, Freiburger Altorientalische Studien 7. Stuttgart: Franz Steiner Verlag.
- Glassner, J.-J. 1999. Dilmun et Magan: la place de l’écriture. In: Van Lerberghe, K. and Voet, G. (eds.) *Languages and Cultures in Contact. At the Crossroads of Civilizations in the Syro-Mesopotamian Realm. Proceedings of the 42th RAI*, Orientalia Lovaniensia Analecta 96. Leuven: Peeters, 133–144.
- . 2002. Dilmun et Magan: le peuplement, l’organisation politique. La question des Amorrites et la place de l’écriture. Point de vue de l’assyriologue. In: Cleuziou, S., Tosi, M. and Zarins, J. (eds.) *Essays on the Late Prehistory of the Arabian Peninsula*. Rome: Istituto Italiano per l’Africa e l’Oriente, 337–381.
- . 2003. *The Invention of Cuneiform*. Baltimore: Johns Hopkins University Press.
- Grillot, F. 2008. *L’Élamite. Éléments de grammaire*. Paris: Geuthner.
- Herrenschmidt, C. 1990. Nugae antico-persanae. In: Sancisi-Weerdenburg, H. and Kuhrt, A. (eds.) *Centre and Periphery. Proceedings of the Groningen 1986 Achaemenid History Workshop*, Achaemenid History 4. Leiden: Nederlands Instituut

- voor het Nabije Oosten, 37–61.
- Herrero, P. and Glassner, J.-J. 1996. Haft-tépé: choix de textes IV. *Iranica Antiqua* 31: 75–82.
- Hinz, W. 1969. *Altiranische Funde und Forschungen*. Berlin: Walter de Gruyter.
- Kenoyer, J.M. 1998. *Ancient Cities of the Indus Valley Civilization*. Oxford: Oxford University Press.
- Koch, H. 1993. Elamisches Gilgameš-Epos oder doch Verwaltungstäfelchen? *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 83: 219–236.
- König, F.W. 1965. *Die elamischen Königsinschriften*, Archiv für Orientforschung, Beiheft 16. Graz (reprint Osnabrück: Biblio Verlag).
- Koskeniemi, K. and Parpola, A. 1982. *A Concordance to the Texts in the Indus Script*. Helsinki: University of Helsinki.
- Koskeniemi, S., Parpola, A. and Parpola, S. 1979. *Materials for the Study of the Indus Script 1. A concordance of the Indus Inscriptions*, Annales Academiae Scientiarum Fennicae, Ser. B, 185. Helsinki: Suomalainen Tiedekatemia.
- Labat, R. 1970. Élamismes dans la syntaxe babylonienne de textes susiens bilingues. *Journal Asiatique* 258: 237–241.
- . 1974. *Textes littéraires de Suse*, Mémoires de la Délégation archéologique en Iran 67, with the collaboration of D.O. Edzard. Paris: Librairie orientale Paul Geuthner.
- Lecoq, P. 1974. Le problème de l'écriture cunéiforme vieux-perse. In: *Hommage universel III*, Acta Iranica 3 = Première série, Commémoration Cyrus. Téhéran – Liège, 25–107 and Pls. IV–XIX.
- Mancini, M. 1984. Ant. pers. *dahyu-*, il segno “DH” e il problema degli ideogrammi nel cuneiforme achemenide. *Studi e saggi linguistici* 24: 241–270.
- . 1992. *Sul sillabismo finale nel cuneiforme achemenide*. Viterbo: Istituto di scienze storico-filologiche, Università degli Studi della Tuscia.
- Mander, P. 1986. *Il pantheon di Abu-Šālabikh. Contributo allo studio del pantheon sumerico arcaico*, Series Minor 26. Napoli: Istituto Universitario Orientale.
- Mayrhofer, W. 1979. Überlegungen zur Entstehung der altpersischen Keilschrift. *Bulletin of the School of Oriental and African Studies* 42/2: 290–296.
- Meriggi, P. 1971. *La Scrittura Proto-Elamica, Parte I^a: La scrittura e il contenuto dei testi*. Roma: Accademia Nazionale dei Lincei.
- Miller, N.F. and Sumner, W.M. 2004. The Banesh-Kaftari Interface: The View from Operation H5, Malyan. *Iran* 42: 79–89.
- Parpola, A. 2011. L'Écriture oubliée de la vallée de l'Indus. In: Vernus, P. (ed.) *Les premières cités et la naissance de l'écriture*. Arles: Actes Sud-Alphabet.
- Possehl, G. 2004. *The Indus Civilization. A contemporary perspective*. New Delhi: Vistaar Publications.
- Potts, D.T. 2008. Puzur-Inshushinak and the Oxus Civilization (BMAC). *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 98: 165–194.
- Scheil, V. 1911. *Textes élamites-anzanites. Quatrième série*, Mémoires de la Délégation en Perse 11. Paris: Ernest Leroux, éditeur.
- . 1923. *Textes de comptabilité proto-élamites (nouvelle série)*, Mémoires de la Mission Archéologique en Perse 17. Paris: Éditions Ernest Leroux.
- . 1935. *Textes de comptabilité proto-élamites (troisième série)*, Mémoires de la Mission Archéologique de Perse 26. Paris:

Librairie Ernest Leroux.

- Schmitt, R. 2008. Old Persian. In: Woodard, R.D. (ed.) *The Ancient Languages of Asia and the Americas*. Cambridge: Cambridge University Press, 76–100.
- Steinkeller, P. 2009. Camels in Ur III Babylonia. In: J.D. Schloen (ed.) *Exploring the Longue Durée: Essays in Honor of Lawrence E. Stager*. Winona Lake: Eisenbrauns, 415–419.
- Stève, M.-J. 1992. *Syllabaire élamite. Histoire et paléographie*. Neuchâtel – Paris: Recherches et Publications.
- Stolper, M.W. 1982. On the Dynasty of Šimaški and the Early Sukkalmahs. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 72: 42–67.
- . 1984a. *Texts from Tall-i Malyan I. Elamite Administrative Texts (1972–1974)*, Occasional Publications of the Babylonian Fund 6. Philadelphia: Babylonian Fund of the University Museum.
- . 1984b. The Neo-Babylonian Text from the Persepolis Fortification. *Journal of Near Eastern Studies* 43: 299–309.
- Stolper, M.W. and Tavernier, J. 2007. An Old Persian Administrative Tablet from the Persepolis Fortification. *ARTA* 2007.001.
- Vallat, F. 2008. Temti-Agun I. Un nouveau sukkalmah. *Akkadica* 128: 73–84.
- Wachter, R. 1991. Abbreviated Writing. *Kadmos* 30: 49–80.
- Wilcke, C. 1987. Die Inschriftenfunde der 7. und 8. Kampagnen (1983 und 1984). In: Hrouda, B. (ed.) *Isin-Išān Bahriyāt III. Die Ergebnisse der Ausgrabungen 1983–1984*. Munich: Bayerische Akademie der Wissenschaften, 108–111.
- ADDENDUM
- The proto-Elamite sign m453 ([Figure 22.1](#)) is attested in linear Elamite script in an unpublished artifact.

CHAPTER TWENTY-THREE

Elamite royal inscriptions



*Florence Malbran-Labat**

Literary genre

Royal inscriptions represent the literary genre through which the kings aimed at proclaiming and preserving eternal memory of their piety and achievements. Four main types can be distinguished.

a. Standard inscriptions, the simple signature of the king on an object offered to a deity; the royal name was sometimes followed by his titular.¹

b. Votive inscriptions (dedications), which, likewise, dedicate an object to a deity, but are more developed in content. They generally include the name of the deity, the name of the king who benefited from the gift, the donor's name (if not the king), the verb expressing the offering² and, for longer texts, the circumstances, the motive of the offering (in general "life", i.e. eternal life) and sometimes a curse against those who would attempt to damage it and/or an appeal for divine blessing.

c. Foundation inscriptions, which, unlike the two previous types, are not related to a votive offering but are repeated identically on multiple exemplars (usually bricks) to commemorate the (re)construction of a temple, a palace, and so on. Included in the masonry of the building, they are not necessarily visible: they are primarily intended to be read by the gods or subsequent kings. The basic pattern includes the name of the king with titles and filiation, the object of the construction and the verb relating to it,³ sometimes supplemented by the circumstances, the motivation of the builder and, more rarely, by a curse. When it is related to a temple, the inscription opens mostly with the name of the deity to whom the building is dedicated.

d. Triumphal inscriptions, far less numerous, are devoted to the religious or military deeds achieved by the sovereign under the protection of his god.

Physical supports

The physical supports of the inscriptions are in relation to their different typologies and vary according to their setting and historical period. Apart from the Neo-Elamite (such as that of Hanni at Izeh) and Achaemenid (at Bisotun, Mount Elvend, Naqsh-e Rostam, Van) rock reliefs, royal inscriptions are mainly on statues, vases and vessels, and ceremonial weapons for standard and votive inscriptions, while bricks are the support par excellence of foundation inscriptions. However, in the Achaemenid period, they are also found on palace walls, column bases, gold or silver plaques, stone or marble tables and more rarely on bricks.

The bricks⁴ show significant variations, both in the material and in the way they were inscribed. First simply dried, then usually baked, they were made of clay soil mixed with a usually vegetal temper, kneaded with water and then pressed and shaped in a wooden mold. Before drying or baking, the text was inscribed by hand or impressed with a stamp. During the 2nd millennium BC the quality of the clay became more refined and formats became more regular; under the Shutrukids, siliceous bricks appeared, some of which were covered, at least on one of the sides, with a blue, green, yellow or brown glaze. In the Neo-Elamite period, two different types coexisted: the siliceous bricks as in the preceding period and large bricks in coarse reddish and heavy clay.

There were at first large square (33–35 × 33–35 cm) or rectangular half-square bricks with quite variable size (especially in thickness). One can assume a certain specificity according to their employ: thus, for example, bricks commemorating the restoration of a wall are all significantly larger than those of the same period dedicated to the rebuilding of the temple *Ekikuanna*. In the Middle Elamite period, quarter bricks were added to these modules, and then, under the Shutrukids, bricks “in parts of a circle” which belonged to columns. Other bricks, integrated in a bas-relief, show a bulge corresponding to the bodies of figures and, like the shaped bricks (“*briques à ressaut*”), attest the integration of inscribed bricks in the architecture of the building.

The position of the inscription on the support is also varied: in ancient times, the bricks in the name of Shulgi show the peculiarity of being framed on the upper or lower surface (“bed face”) of the brick; the inscriptions of the other kings lie on the side face, usually in vertical lines. This type developed under the SUKKAL.MAH and became standard until Shilhak-Inshushinak; innovatively, some bricks in the name of Untash-Napirisha bear an inscription that continues line by line on two consecutive side faces. Shilhak-Inshushinak returned to the old way of writing vertically on one or even more side faces in the so-called *takkime* (“(for) the Life”) inscriptions. There are also square bricks stamped on five or six faces. On the bricks of Neo-Elamite sovereigns, the inscription, often stamped, is mostly on a side face.

In the Achaemenid period, bricks, attested in a much lower number, are squared, glazed or unglazed, and join each other to form inscriptions mostly of standard type.

Characteristics

In Elam, the literary genre of royal inscriptions occupies a very special place due to several factors.

Incomplete knowledge

While the late Elamite royal inscriptions, originally employed for the decipherment of cuneiform writings, come from various regions of Persia, our knowledge and understanding of this literary genre in earlier periods are distorted by the predominance of findings from the excavations conducted in Susiana, while the rest of the country remains largely unexplored. It was not before the years 1960–1970 that archaeological research was conducted in Fars, Kerman and Sistan, gradually expanding our knowledge of the history of ancient Iran (see especially Boucharlat 1998 and McCall 2013). At present, the vast majority of royal inscriptions from pre-Achaemenid Elam comes from Susiana, a region particularly open to Mesopotamian influences.

The character of royal power and the political history of Elam

Two characteristics of royal power in Elam were retained in royal inscriptions. The first is the profound duality of the state, formed by the “lowlands” of Susiana and the “highlands” of the Zagros mountains. During periods of political weakness, Susiana was often attached to its Mesopotamian neighbor, but whenever the Elamite kings managed to unify the country, the mountainous component would impose indigenous traits. Here the principles of royal legitimacy differed. Father-son lineage was not the only mechanism of power transmission: the children of the brothers and also of the sisters of the reigning king had rights. This multiplicity of heirs able to claim the throne, which sometimes favored the breakup of the kingship, is the second characteristic reflected in the royal inscriptions.

The earliest royal inscriptions of Elam are those of the kings of Akkad and Sumer, who conquered Susiana at the end of the 3rd millennium. The Elamite power that arose then in the Zagros and eventually became a powerful empire did not yet express itself through this literary genre. It was only in the Middle Elamite period that the kings who unified lowland and highland for nearly four centuries celebrated their deeds as great builders with inscriptions, mainly in Susiana. At the end of the 2nd millennium, when Elamite unity and power disappeared, a troubled period lacking epigraphic evidence began. The political power was broken and the reigns, often short, provided very few inscriptions. It was only with the Achaemenid dynasty that this device of proclaiming royal grandeur was revived.

The multilingualism of inscriptions

During the two millennia in which royal inscriptions were written in Elam, they were composed in several languages and in several writings.

The oldest inscriptions, in the name of Naram-Sin, Shulgi and Shu-Sin, are in Akkadian and Sumerian. Elamite (written in Linear Elamite script) was used at this time only by Puzur-Inshushinak, the last king of the dynasty of Awan. Akkadian remained the main language for the kings of Simashki, then for the “Grand Regents” (SUKKAL.MAH) and in the 15th century for the Kidinuids.

It was in the middle of the 2nd millennium that Elamite, the vernacular language (now written in cuneiform), was adopted by the Igihalkids and afterwards by the Shutrukids. However, Untash-Napirisha, while writing a very large number of foundation inscriptions in Elamite, retained in a few cases the practice of bilingual texts (but not bigraphic) with several lines in Elamite and the last ones in Akkadian; a few rare bricks bear a text entirely in Akkadian. In the 1st millennium, the few extant brick inscriptions are in Elamite with a couple of exceptions in Akkadian (IRS 55–56). Finally, the Achaemenid kings generally practiced both trilingualism and trigraphism, the same text being written in Babylonian, Elamite and Old Persian, with each language written in a different cuneiform script, to which a version in hieroglyphic Egyptian was sometimes added.

The role of writing in Elamite culture

The role of writing, like that of building, was not the same in Elam as it was in Mesopotamia, where the practice of royal inscriptions is a constant feature of the manifestation of royal power. The king is the builder par excellence and his piety is asserted by the construction of temples. In Elam the nature of royal power, exerted both over (semi-)nomadic and sedentary peoples whose religion was often practiced in outdoor natural spaces, modifies the importance of royal inscriptions, which appear as a “westernizing” expression of royal ideology, and one could think that it was largely due to the impact of their prestigious neighbors that they practiced this device of communication to proclaim their devotion and power.

Contents

The Paleo-Elamite period (ca. 2400–1450 BC)

Three groups of royal inscriptions can be chronologically singled out: first, at the end of the 3rd millennium, the inscriptions of the rulers of Akkad and Sumer, then those of Puzur-Inshushinak, king of Awan and finally, in the first half of the 2nd millennium, those of the

rulers of Simashki, Atta-hushu “shepherd of the people of Susa” and the “Grand Regents” (SUKKAL.MAH).

The inscriptions of the kings of Akkad and Sumer

Apart from the impression of a seal (IRSA IIG1a) in the name of Epir-mupi, “viceroy of Elam”, the oldest royal inscriptions found in Susa are those of the conqueror kings of the dynasty of Akkad (Manishtusu, Naram-Sin) and afterwards Ur III (Shulgi, Shu-Sin), rulers of Susiana at that time.⁵ The inscriptions, in Akkadian for the first dynasty, in Sumerian for the second, are few and usually short and of standard type. The inscription of Naram-Sin (IRS 1) is mutilated and bears only his name and titulary like the (complete) one of Shu-Sin: “the beloved one of Enlil, the mighty king, king of Ur and king of the four regions” (IRSA IIIA4a; IRS 3). Only those of Shulgi make specific reference to Elam: one, classical in wording, attests construction activities in Susa, reporting that Shulgi “built a temple to Ninshushinak and restored it to its (original) place” (IRS 2). Another inscription mentions a military campaign and a civil construction: “Shulgi, the god of his country, the strong, the king of Ur, the king of the four regions, when he ravaged the country of Kimash and Hurtum, he established a moat and built (its) rampart” (IRSA IIIA2p).

Recent researches have brought to the attention of scholars the testimony of the activities of another king, Amar-Sin, at the ancient site of Huhnur: an inscribed modeled stone recounting how he captured that city, bringing back a statue of the god Ruhurater (Henkelman 2008: 304) and rebuilding his temple there (Mofidi-Nasrabadi 2005).

The inscriptions of Puzur-Inshushinak ⁶

In this ancient period, the case of Puzur-Inshushinak, last king of the dynasty of Awan (ca. 2100), is unique in the history of Elamite royal inscriptions. On the one hand, while he dedicated many monuments to his gods on the Acropolis of Susa, no foundation bricks in his name were found. On the other hand, in a program that was probably nationalist, he promoted, alongside cuneiform script for inscriptions in Akkadian, a properly Elamite writing, probably derived from the Proto-Elamite script (which, from this point of view, could be called “Proto-Linear”; see Desset, Chapter 20 in this volume) used for accounting documents of the 3rd millennium.

We know approximately 20 inscriptions in Linear Elamite, including 19 excavated at Susa (inscriptions A-P, R, and T-U), one at Shahdad in Kerman (inscription S) and another in the region of Anshan (inscription Q on a silver beaker). This writing is not completely deciphered, and we do not know the exact meaning of these texts. They are mostly bilingual and bigraphic: an Akkadian cuneiform text appears next to the Elamite text in linear script. The

supports are varied: statues (inscriptions C, I = CRS 55), foundation stones (B = CRS 54, D), a table (A), a basin for ablutions (E), steps of a staircase (F-H, U) and so on. Most objects were dedicated to Inshushinak and must have come from his temple, but two door sockets and some foundation nails (J, K, L) belonged to the temple of the god Shugu (IRSA IIG2a).

These inscriptions are spread throughout his reign since they bear either the simple title “governor (ENSI) of Susa” or that of “governor of Susa, viceroy (G R.NÍTA) of Elam”, while on some of the above-mentioned steps he is “the mighty king of Awan”. One of them, in Akkadian, following the Old Akkadian titulary, refers to the domination of the “Four Regions”: “To (his) lord, Puzur-Inshushinak, mighty king of Awan, son of Shimbi-ishuk, the year in which the god Inshushinak looked at him (and) gave (him) the four regions to rule, he built a (stone) staircase”; it ends with a curse like several other inscriptions in Akkadian. It is in a very unusually long dedication (IRSA IIG2f) that he states the regulation of religious endowments: “To [Inshushi]nak, his [lord, Puzur-Inshu]shinak, [the son of Shim]pi-[ish]uk, [the gover]nor [of Susa, vicer]oy [of the coun]try [of Elam, ... when he opened the canal Sidari, he erected his statue in front of him; and at his gate he placed a (foundation) nail of copper and cedar. He established a ram for every day in the morning (and) a ram in the evening, and he made the singers sing morning (and) evening at the gate of Inshushinak, and he offered twenty (units) of pure oil to embellish his gate. He offered... (various objects) ... He conveyed a judgement of justice in his city. Whoever will fail to comply to his judgment and whoever will remove his gift, Inshushinak and Sin and Nin-hursaga and Narundi⁷ (and) all the gods may up[root his] roots and take away his offspring! may he not be[get] an he[ir]! [...]”.

Another unusual dedication (IRSA IIG2e) resembles a triumphal inscription and evokes a series of victories and the submission of the king of Simashki: “[Puzur-Inshushinak, (... titulary), when Kimash and the country of Hurtum rebelled against him, he went to capture his enemies, and defeated Hubsana ... (Seventy place names follow). Then, he subjugated (these cities) and when the king of Simashki came, he seized the feet of Puzur-Inshushinak; Inshushinak heard his prayers and [...]”.

The inscriptions of the first half of the 2nd millennium

Puzur-Inshushinak’s innovations had no future, and linear writing disappeared completely. The literary genre of royal inscriptions entered into a less productive period in Elam.

In Elamite, only one inscription (EKI 3A+B) is attested for this period: it is written on behalf of the prince Siwe-Palar-hupak (mid-18th century) on two fragmentary tablets found in Susa; its structure is similar to that of Temti-Agun (see below) in titulary (*ligawe riša[kki]* “Great One⁷ of the kingdom”, *menik Hatamtik* “prince of Elam”), filiation (*ruhu-šak* “son-of-the-sister of Sirukduh”), and motivation (“for my life, for that of Amma-hashtuk, for her family and her descendants”). Then he reports the sacrifices by which he implores Inshushinak to

grant him everlasting prosperity. Finally he proclaims to have established his cult for the peoples of Anshan and Susa and ends by vowing fire for his enemies and impalement for their allies.

The kings of the highland belonging to the dynasty of Simashki,⁸ who preceded Siwe-palar-hupak, practiced, as far as we know, only very sporadically this device of celebrating their religious and political power: the few inscriptions that have reached us, brief and not very original, are written in Akkadian (but often in a largely ideographic writing).⁹ On construction bricks, Tan-Ruhuratir and Idadu, given as 9th and 10th kings in the dynastic list, bear only the title of “governor of Susa”. The only known inscription of the first (IRS 4) is related to the construction of the temple of Inanna.¹⁰ In contrast, the inscribed bricks of Idadu are more copious and varied: one of them is brief and commemorates the establishment of the Acropolis rampart and another the renovation of the temple of Inshushinak; even if based on an old structure, it is not without a certain originality because it is attested in two versions with the same content, one in Sumerian, the other in Akkadian.¹¹ Finally, on two bricks too mutilated to understand the context, he was styled as “king of Simashki and Elam” (IRS 9).

At the end of the 20th century, Atta-hushu’s seizure of power marked the end of the Simashkian dynasty and a political emancipation of Susiana.¹² This king adopted the title of “shepherd of the god Inshushinak” (SIPA ^dMÛŠ.EREN) or “shepherd of the people of Susa” (SIPA ÊREN MÛŠ.EREN), stating his devotion to this god, who was properly Susian, and proclaiming to be his “beloved servant” (R KI.AG). The diversity of his dedications reflects an intense activity, both civil and religious: they celebrate the construction of a causeway (*titūram*) (IRS 10), of a temple “beloved residence (of the god)” (Ê.KI.ÁG.A.NI) (IRS 13), the restoration of “the ancient shrine” (*kizzum labiram*) “for his life” (IRS 11) and, exceptionally, the erection of a stele of justice (ALAM *kittum*) in the market (IRS 12).

As regards filiation, while the rulers of Awan and Simashki made reference to a direct descent (DUMU PN “son of PN”), another type of family relationship appeared with Atta-hushu and was reused by Siwe-palar-hupak (in Elamite: *ruhu-šak*) and by the SUKKAL.MAH, then occasionally in the Middle Elamite period: “son/heir-(by/of-)the-sister” (DUMU NIN₉). The interpretation of this term is disputed: “nephew” (legitimacy would be inherited by the sister of the preceding king or of an ancestor considered the founder of the dynastic line) or “son-of-the-sister (wife)” (legitimacy would be doubly assured by a father and a mother of the same blood).

Atta-hushu represented a transition¹³ before the empire of the “Grand Regents” (SUKKAL.MAH). Only four of them, in the present state of our knowledge, produced brick inscriptions.¹⁴ Temti-agun differs from his successors by his strictly local title (“regent of Susa”)¹⁵ and his filiation: he refers not to Silhaha but to Sirukduh (DUMU NIN₉-š_u š_a *Sirukduh*¹⁶). His inscription for the construction of the temple of the goddess Ishmekarab

(IRSA IVO8a = IRS 14) provides a hitherto unprecedented development regarding the motivation “for the life”.

Much more traditional in composition, most building inscriptions of Temti-halki, Kuk-Nashur and Kuk-Kirwash begin with an invocation to the god Inshushinak. Then, after the titulary and the filiation, the building activity dedicated to Inshushinak by the king “for his life” follows: a temple in baked bricks (*siyanam ša epirtim*) for Temti-halki (IRSA IV09b = IRS 16), the Upper Temple of the Acropolis in baked bricks (*kukunnam ša SIG₄ AL.LU.RA ša URU.AN.NA*) for Kuk-Nashur (IRS 17), the *Ekikuanna* renovated with a new wall in baked bricks for Kuk-Kirwash (IRSA IVO11a = IRS 18).

The Middle Elamite period (ca. 1450–1050 BC)

This quite homogeneous tradition of royal inscriptions experienced a revolution with the seizure of power by new dynasties, the Kidinuids, Igi-halkids and Shutrukids, of which at least the last two exercised strong control in Elam.

The dynasty of the Kidinuids

In the middle of the 2nd millennium, in a period of turmoil, the Kidinuids took power temporarily at Susa and Kabnak (Haft Tappeh). Continuing to write in Akkadian, two descendants of Kidinu,¹⁷ without indicating their filiation, call themselves “king of Susa”. Inshushinak-shar-ili¹⁸ mentions in a classical way the reconstruction of the temple of Inshushinak, introducing the address to his successors to ensure the eternity of his work (IRS 19¹⁹). The inscription of Tepti-ahar (IRS 20) is unparalleled: it mentions the manufacture of “his statue and (those) of his maid-servants whom he loves and of favorable deities who intercede for him and his maid-servants whom he loves” as well as a nocturnal ceremony that remains very mysterious: “At nightfall, four women of the temple guards ... must lie at the feet of the protective and intercessory deities; they must light torches[?] and keep watch. The *hašša*, the *kiparu*, the *pāšišu* high priest, the guards of the temple, and the temple priest must seal the temple after them. At daybreak, after they have checked (the statues) of the king, the protective and intercessory deities, they can exit and go (away)”.

Probably at about the same time another sovereign, Igi-hatet, produced a building inscription (Daneshmand and Abdoli 2015) in Akkadian found at Dehno for the glory of the goddess Manzhat, who gave him the kingship over Susa and Anshan and for whom he restored the ancient *kukunnû*.

After this period when the power of the SUKKAL.MAH was probably fragmented into many small temporary rival kingdoms, the powerful dynasty of the Igi-halkids would impose itself over a unified Elam, giving a new dynamism to the royal inscriptions, for which they

imposed the use, with a few exceptions, of their vernacular language, Elamite.

The dynasty of the Igihalkids (14th century)

The brick inscription of Humbanumena “king of Anshan and Susa” (IRS 21), written in Elamite, has a very new structure and formulation, probably due to the origin of his power in Fars and the novelty of his kingship at Susa.²⁰ It is composed of an invocation to the gods of Liyan, a specific titulary which is properly Elamite, the mention of the establishment of his kingship, the refoundation of a temple for “the life” of members of the dynasty and the prosperity of his kingship: “O Napirisha, Kiririsha and the (gods) Protectors of the Earth, (gods) of Liyan, I, Humbanumena, son of Attar-kitah, I (am) the Great One of the kingdom, the Elamite (i.e. of the Elamite country) master, the holder of the Elamite throne, the Elamite sovereign, the king of Anshan and Susa; because of the continuity with (my) mother, Napirisha chose me and loved me: (once) prosperity (was) established[?], the crown restored[?], Inshushinak gave me the kingship. For my life, for the life of Mishimruh and the life of Rishap-La, for this (reason), the temple being once in ruins[?], I re-established the *kukunnum* in its place and dedicated it to Napirisha, Kiririsha, and the (gods) Protectors of the Earth. May Napirisha, Kiririsha, and the (gods) Protectors of the Earth give me a long life, may they grant me a continually prosperous kingship”.

Untash-Napirisha, his son and successor, multiplied the dedications linked to his intense religious activities and the establishment of the “holy city” of Dur-Untash, the shrine (*siyan-kuk*) where he intended to proclaim his ecumenical will, dedicating temples or chapels to all the gods of the lowland and highland. In contrast, no inscription recounts his military exploits in the war against Babylon. Most of his foundation inscriptions are in Elamite,²¹ and their structure remains traditional: name, filiation and titulary, designation of the temple²² and verb of construction.²³ Further actions are sometimes added to the verb “to build”: “I have placed my name”, “I have installed (a) DN in gold”, or, at Chogha Zanbil, “I carved a DN in gold, I installed him as (god) of a temple of the shrine”, “(I built) a basement[?] of 10 cubits”, “I raised a ziggurat”. The reason behind the construction, which is usually the king’s happiness and the prosperity of his kingdom,²⁴ its purpose or its consequences²⁵ are often mentioned. Many inscriptions explicitly include a dedication to the god (“... I dedicated to DN”) and/or a final plea for divine blessing.²⁶

Some bricks of the *kukunnû*, the Upper Temple at the summit of the ziggurat, bear a bilingual inscription (MDP 41 32): the main body of the text is in Elamite, but the final curse is in Akkadian.²⁷ This inscription recapitulates all the work undertaken at Dur-Untash: the choice of the site, the foundation of the city, the surrounding walls and the sanctuaries, and the building of the gates. The final curse invokes the anger of the gods against possible defilers:

“Whoever would throw projectiles against the surrounding walls of this sanctuary, whoever would open a breach, whoever would carry away bricks, whoever would burn the door, and the enemy who would show up (here) and launch an attack against the surrounding walls, may the anger of the gods Napirisha, Inshushinak, and Kiririsha of the shrine be upon him (and) may his offspring not flourish under the sun!”.

Two types of building bricks bear an entirely Akkadian text (IRS 32).²⁸ One, pertaining to the building that stood atop the ziggurat, is unusual in composition: the name of Untash-Napirisha is followed neither by his filiation nor his titulary; it is the refinement and color of the masonry that are celebrated here; a particular development is assigned to the final curse: “... whoever will tear down, whoever will destroy its brickwork, whoever will take or carry away to another county its gold, its silver, its obsidian, its alabaster, and its masonry, may the anger of Napirisha, Inshushinak, and Kiririsha of the sanctuary be upon him and may his offspring not flourish under the sun!”. The second type commemorates “technical” achievements: two texts (MDP 41 IV-V) differ only by the object of the construction, in one case a canal, in the other the decantation basin to which the canal led. This inscription is unique in placing the wishes of happiness for the prince and of prosperity for the kingdom immediately after his titulary: “I, (... titulary), for my life and my well-being lasting many days, long years, (so that) I may exercise a happy kingship, I built a canal ‘Glory of My Name’. I dedicated it to Napirisha and Inshushinak of the shrine. The work that I have carried on, (o) Napirisha and Inshushinak of the shrine, may you accept it”.

No building inscriptions of the two successors of Untash-Napirisha are known to us, probably suggesting a weakening of the Igihalkids. Then the coming of a new man, Shutruk-Nahhunte, marks the takeover of a new dynasty.

The dynasty of the Shutrukids

Most of the brick inscriptions of the Shutrukids perpetuate the previous structure, but with a renewal in expression.²⁹ Moreover, the difficulty of defining the royal legitimacy at the heart of this complex family gave rise to a new type of text which assigned a prominent role to wishes for the life of the members of the royal family.

These kings generally used the title “king of Anshan and Susa”, but sometimes also “Great One of the kingdom” (e.g. Shilhak-Inshushinak IRS 47 and 49; Hutelutush-Inshushinak IRS 51) or “(king) whose kingdom the god Inshushinak loves” (IRS 48). As for Kutir-Nahhunte, in two of his inscriptions he adopts only a religious title: “beloved servant of Inshushinak” (IRS 35–36).

New temple designations appear in these building bricks: pillared hall (*hiyan*), exterior chapel (*kumpum kiduya*, probably dedicated to the cult of the royal family; IRS 35 and 40), temple of the grove (*siyan husame*), dynastic chapel (or altar) (*suhter*) and so on.

Certain texts are related to inscriptions of triumphal type, for example, when Shutruk-Nahhunte proclaims to have brought to Elam the glorious stela of Naram-Sin (EKI 22) or when Shilhak-Inshushinak lists a large number of cities over which Inshushinak allowed him to extend his power (EKI 54).

Among these inscriptions, some are atypical: Shutruk-Nahhunte commemorates the reconstruction of the temple of Manzat at Dehno (MDP 53 9) without mentioning either his titular or his filiation but noting the fact that he is adhering to an old tradition³⁰: he mentions the name of his predecessors and shows concern for the safeguarding of his work in the future. Shilhak-Inshushinak, in his turn, recalls the particular circumstances in which he built the dynastic chapel (IRS 41): his brother Kutir-Nahhunte died before manufacturing the representations of figures in baked bricks; Shilhak-Inshushinak, once enthroned, made them and used them to build the dynastic chapel.

The most innovative inscriptions are the *takkime* ones. They do not involve dedications to the god or wishes that the offering will be appreciated. The essential element is the motivation for which the work was done: the life of the royal family. Thus the royal line is defined,³¹ both by the evocation of his predecessors (his “ascendants” in kingship, whom he asks for intercession in the netherworld)³² and the definition of his descendants. The manner in which the members of the ruling family are reported is not fixed and would change as Shilhak-Inshushinak established his legitimacy within the dynasty after his marriage with Nahhunte-Utu, who already had children, previously the only legitimate heirs of royal power. He tried to anchor his royal power by attaching himself to more or less distant predecessors and, when he had children himself, inflecting the definition of dynastic lineage. In the wishes for “life”, sometimes he refers to the descendants through a globalizing expression that evolved over time: “her descent” (of Nahhunte-Utu), “the children that I begot and (those) of Nahhunte-Utu, they (who are) the posterity to whom we have passed (it)” (IRS 48A), “our *posterity*” (IRS 49) or “my descent and the life of my posterity, those to whom I have passed (it)” (IRS 44). When the names are enumerated, the list comprises either seven or nine names; they are listed in chronological order or by naming first the sons and then the daughters. In the longest list, the youngest daughter is qualified as “beloved daughter”, which can express a special predilection: “Bar-Uli, my beloved daughter, *who represents my salvation*” (IRS 47 and 48B).³³

It is without doubt the complexity of this dynastic succession which explains the curious filiation provided by his successor Hutelutush-Inshushinak: “beloved son of Kutir-Nahhunte and Shilhak-Inshushinak” (IRS 51) or “beloved son of Shutruk-Nahhunte, Kutir-Nahhunte, and Shilhak-Inshushinak, beloved brother of Ishnikarab-huhun³⁴” (IRS 52). As regards “the life”, he refers to that of his brothers and sisters, nephews and nieces, and of his House (IRS 51), or only to that of his brothers and sisters (IRS 52) while elsewhere (IRS 53) he says only to have laboured “for my life” and concludes with a curse that attaches his name to that of the founder of the ancient dynasty of the SUKKAL.MAH: “the destroyer who would steal them, the looter

who would hammer the protocol that is placed (here) instead of preserving it, may Inshushinak *trample with his feet*², may the curse of Hutelutush-Inshushinak and Shilhaha be inflicted upon him”.

Even if some inscriptions attest Hutelutush-Inshushinak’s activities also outside of Susa, at Shalukki (EKI 64) and Anshan (Lambert 1972), his reign was disturbed by the campaigns of Nebuchadnezzar, which forced him to take refuge in the highland at least temporarily. Elam then entered a dark period, which is not documented by any royal inscription.

The Neo-Elamite period (ca. 1050–539 BC)

The Neo-Elamite II period (ca. 750–653) saw a revival of the “kings of Anshan and Susa”, but the royal inscriptions perpetuate only the names of Shutruk-Nahhunte II, his brother and successor Hallutush-Inshushinak, and in the Neo-Elamite III period (ca. 653–539), Tepti-Huban-Inshushinak.³⁵ It seems that in this period, royal power flourished in the eastern parts of the kingdom where the Elamite princes preserved their cult, as attested by the rock reliefs of Kul-e Farah, Kurangun and Naqsh-e Rostam.

The brick inscriptions of Shutruk-Nahhunte II are of four types: two in Akkadian³⁶ and two in Elamite. One (IRS 57) is inscribed in a frame on the upper or lower surface and celebrates the establishment of a *kukunnum* of Inshushinak in the recently conquered Karintash (“O Inshushinak, my god, you have made me strong, here I have made your name prosper”), while referring to the kings Hutelutush-Inshushinak, Shilhaha-hamru-Lagamar and Hubanimmena; the inscription ends with a curse: “Whoever would neglect² what belongs to me, may he lose the blessing of Inshushinak and be excluded from the light of Inshushinak!”. The sole inscription of his successor Hallutush-Inshushinak (IRS 58) proclaims that he has “expanded the kingdom of Anshan and Susa” and, after a brief mention of the restoration of the temple of Inshushinak, it is closed by a dedication to the god and wishes that the god would bestow upon him a fair lot in accordance with his piety and not the painful fate of the impious.

Three inscriptions of Tepti-Huban-Inshushinak, in Elamite, are of standard type (IRS 59–61), with the name and filiation of the king, the building activity (IRS 60) and the dedication to Inshushinak (IRS 61). Another inscription (IRS 62) is atypical, being related to triumphal inscriptions and alluding to a successful campaign: “... I have broken off the country of the Wicked Ones and have enlarged Elam; I have broken off the country of the Enemies and I have received their tribute ...”.

The Achaemenid period (539–331 BC)

The Achaemenid period saw a revival of royal inscriptions.³⁷ They are generally characterized by multilingualism: most are in the three “official” languages of the empire, even if some are

only in Old Persian (DPd, DPe),³⁸ Elamite (DPf, DSu), or Babylonian (CB, DPg, DSaa, XSb, XSe, A¹Pb, D²Sb); others couple two of these languages: Old Persian and Elamite (DSd, DSi, XPi, XPk), Old Persian and Babylonian (DSg, DSo, DSw, XPf, A¹Pa). The inscriptions made in Egypt (DZ, DSab) add a fourth language (in hieroglyphic).³⁹

Thus the inscriptions of the Achaemenids favor the languages written in cuneiform without resorting to Aramaic, the language of administration and diplomatic correspondence: the inscription of Bisotun, through which Darius proclaimed his legitimacy, was engraved on the rock in Elamite, Old Persian and Babylonian several meters above the ground. It was not readable by a passer-by from below but was released in Aramaic so as to be proclaimed throughout the empire (Lecoq 1997: 56).

Multilingual inscriptions generally repeat the same text, but the Babylonian versions may present significant variants in accordance with the tradition of the Mesopotamian scribes, for example, assessing accurately the number of casualties, wounded and prisoners taken in the fighting, dating the events, or using a Median form for Iranian proper names (Lecoq 1997: 54–55). In Persepolis, four inscriptions (DPd, DPe, DPf, DPg) were engraved side by side to commemorate, each one in its own way, the construction of the monumental complex. Two are in Old Persian, one imploring the protection of Ahuramazda for the Persian people, the other asserting their superiority over the various subject peoples and exhorting the reader to protect the Persian army. The Elamite text relates the construction of the terrace, and the Babylonian one reported the multiple peoples who worked there.

The structure of the inscriptions of the Achaemenid kings differ from those of their predecessors in Elam. Titulary and filiation resort to new formulae; the title can be simple (“the king”) or more developed: “the great king, the king of kings, the Persian king”, “the great king, the king of kings, (the Persian king/the king in Persia,) the king of peoples”, “the great king, the king of kings, the king of peoples/countries, the king on this (great) earth”, “the great king, the king of kings, the king of peoples having many origins, the king on this great earth even far away”. The filiation is limited to the father’s name and the belonging to the Achaemenid family, or recalls the membership to the Persian people and the Aryan world: for example, “Darius..., the son of Hystaspes, the Achaemenid, Persian, son of a Persian, Aryan, of Aryan descent”. A cosmology can precede the titulary-filiation: “Ahuramazda is the great god, who created this earth here, who created the heaven up there, who created man, who created happiness for man, who made Darius king...”, “Ahuramazda is the great god, who created the beauty that one sees, who created happiness for man, who bestowed wisdom and bravery upon king Darius” (DNb).

In reference to kingship, its extent and its excellence, the formula also knows variants: it mentions only the Persian people (e.g. “this Persian people that I possess, having good horses, good men – the great god Ahuramazda granted it to me, thanks to Ahuramazda I am king of this people” (AmH), or more generally: “here is the kingdom which I hold, from the Scythians

who are beyond Sogdiana to Ethiopia, from India to Lydia, the one that Ahuramazda, the greatest of the gods, bestowed upon me” (DH), sometimes listing the peoples “who brought a tribute, who obeyed him, and whom his law upheld” (DNa, DPe, DSm).

The inscriptions often include a praise of the deeds and virtues of the sovereign: “The king Darius says: “thanks to Ahuramazda, I am such that I am friend of right, I am not friend of injustice; my desire is not that the weak suffer injustice because of the strong; my desire is not that the strong suffer injustice because of the weak”” (DNb and XPl), “I am a good rider, I am a good archer both on foot and horseback, I am a good spearman both on foot and horseback” (DNb). These are the qualities that Ahuramazda bestowed upon him (see XPl).

Another frequent element of the royal proclamation concerns the construction⁴⁰ on which it is written: “And Darius the king says: ‘on this terrace, where this palace was built, no palace had been built; thanks to Ahuramazda, I built this palace and Ahuramazda wanted so, with all the gods, that this palace was built; and I built it; thus it was built solid and excellent and exactly as I had ordered””(DPf). It could also be related to a technical achievement like the digging of a canal “from a river named Nile, that flows in Egypt, towards the sea that comes from Persia; so, this canal was dug as I had ordered, and the ships went from Egypt through this canal to Persia, according to my good pleasure” (DZc).

The antiquity of the restored building is mentioned with regards to Susa: “the king Darius says: ‘thanks to Ahuramazda, there were many buildings that previously were not in good shape; at Susa, I saw that the surrounding wall was in ruins; therefore, I built there another wall”’. Some texts (DSf and DSz) are peculiar because they provide construction details: “this palace that I made in Susa – its materials were brought from far away; downward, the earth was dug until I reached the stone in the earth; when it was dug, gravel was thrown on one side to 40 cubits in depth, on the other to 20 cubits in depth; on this gravel, the palace was laid ...”, then the cedar wood brought from Lebanon, the gold from Lydia and Bactria, the stone columns from Elam as well as the ethnicities of those who worked them are mentioned.

At the end of the inscriptions, a more or less developed plea for divine blessing appears: “May Ahuramazda protect me as well as my house” (DH), “may Ahuramazda protect me as well as my house and this people from evil, this is what I ask Ahuramazda; may Ahuramazda give me this” (DNa), “May Ahuramazda bring me his help, together with all the gods, and may Ahuramazda protect this people from the (enemy) army, famine, and falsehood; may not the (enemy) army, famine, and falsehood reach this people; this is what I ask as a favor to Ahuramazda, together with all the gods; may Ahuramazda together with all the gods give me this as a favor” (DPd). A general plea for good conduct can also be inserted in the text: “O man! may not the command of Ahuramazda seem bad to you! Do not turn away from the right path! Do not revolt!” (DNa, DNb).

Among the Achaemenid royal inscriptions, some occupy a special place in their own right. Darius made a trilingual inscription to be engraved on a rock relief dominated by the

representation of Ahuramazda. This is primarily a political and controversial manifesto intended to proclaim his legitimacy. At the beginning, after his genealogy, he stated his double legitimacy: by descent and by divine election; then he lists the 23 subject peoples over which he exercises his just kingship, blessed by Ahuramazda. The narrative of each of the nine successive revolts that broke out in various parts of the empire in the first year of his reign is the core of the inscription. It is closed, after a brief summary, by the address to every just king to carefully avoid falsehood and by the injunction to spread this proclamation.

The assertion of royal legitimacy is also the subject of the so-called “Harem” inscription (XPf), where Xerxes proclaims the choice made by his father to appoint him as successor, likely at the expense of his brothers, and praises the way he has excellently continued his father’s work. In the so-called “Daiva” inscription (XPh), he exalts his pious conduct and the need to worship Ahuramazda: after an ordinary introduction (cosmogony and list of peoples of the Persian empire), the inscription reports the repression of a people which is not named specifically, but which worshiped evil demonic gods (the *daiva*), and ends mentioning the happiness, in his lifetime and after his death, of the one who worships Ahuramazda “at the prescribed time and according to the rite”.

Finally the cylinder of Babylon celebrates the decision of Cyrus II to restore the local cults and proclaims his legitimacy in Babylonia; written in Babylonian, it is in fact the work of the clergy of Marduk in reaction to the religious policy established by Nabonidus. The first section describes the impiety of the king of Babylon who neglected the worship of Marduk and abused the population, causing the angry god to choose a prince having “pious deeds and right heart” in order to give him kingship over the entire world. In the second section, Cyrus, after providing his titulary and filiation, relates how the kings of all the parts of the world brought him tribute, how he restored the cults in their right place, and rebuilt the great surrounding wall of Babylon.

Thus, for nearly two millennia, Elamite royal inscriptions, despite the often traditional structure of this literary genre, reflected through their ruptures, their innovations and their erratic elements, the crises and the embodiments of kingship in Elam, both in its political and religious aspects.

Abbreviations

CRS	Items in the exhibition catalogue Harper et al. 1994.
EKI	Royal inscriptions in Elamite in König 1965.
IRS	Brick inscriptions in Elamite and Akkadian from Susa (and Chogha Zanbil) in Malbran-Labat 1995.
IRSA	Royal inscriptions in Sollberger and Kupper 1971.
MDP	41 Inscriptions from Chogha Zanbil in Steve 1967.

Notes

* Translated from French by Gian Pietro Basello.

- [1](#) One can include in this type also inscriptions on seals.
- [2](#) For example, “Manišusu, king of Kiš: Ešpum, his servant, dedicated (this statue) to the goddess Narundi” (IRSA IIA3d).
- [3](#) For example, “Indattu, the governor of Susa, the beloved one of the god Nin-Shušinak, the son of Tan-Ruhuratir, built the rampart of the Acropolis” (IRSA IV03b).
- [4](#) They are designated using words couched in terminology that is Mesopotamian (*libittu*/SIG₄ “brick”, *epirtu*/SIG₄.AL.LU.RA, *erimtu* “baked brick”) or Elamite (*halat* “brick of unbaked clay”, *upat* “baked brick”, sometimes qualified as *upat hussip* “colored brick?”, *upat aktiya* “glazed sandstone brick” [“brique de grès émaillé” in French], *upat mušiya* “glazed brick” [“brique vernissée”], sometimes also *lansitimma* “gold-plated” or *lanini* “silver-plated”).
- [5](#) These inscriptions may also be those made by notables on behalf of their king (see e.g. IRSA IIA3d, IRSA IIIA3i). Some objects bear dedications, for example, a cast bronze hammer with shaft-hole (CRS 56) on behalf of Shulgi.
- [6](#) André and Salvini 1989.
- [7](#) See Anthonioz and Malbran-Labat 2013. The usual translation is “enlarger” (“agrandisseur” in French).
- [8](#) Not properly a dynasty, but princes of an “interregional” state, grouping several geo-political entities.
- [9](#) Standard inscriptions on seals (IRSA IV03c, IV04a and b, IV06j) and small vases (IRSA IV06f), etc., in Akkadian or Sumerian are also known.
- [10](#) This is also the goddess whom Mekubi, his wife, invoked in a fragmentary inscription (IRS 5).
- [11](#) “To Inšušinak, his lord, for (his) life, Idadu, the governor of Susa, the beloved servant of Inšušinak, the son of Tan-Ruhuratir, did not refurbish the ancient wall in bitumen (but) built a new wall in baked bricks at the back of the *Ekikuanna*; he had (it) built for his life” (IRSA IVO3a = IRS 6–7).
- [12](#) His name appears also on bronze objects from Luristan but with a slightly different title (“the one who holds the reins of the Susian people”).
- [13](#) An inscription without comparisons in its typology (IRSA IV06a), on a clay cylinder (which is a rare support), is variously interpreted but clearly refers to a tripartite power between Ebarti, Silhaha and Atta-hušu “regent and scribe (*tepir*) of the people of Susa”.
- [14](#) Furthermore, the name of Simut-wartaš, son of Sirukduh, appeared in a brief inscription on an alabaster base found at Liyan (Potts 2016: 168, Pl. 6.4, and 169, Figure 6.1).
- [15](#) Even if on a brick fragment (MDP 53 1) from Chogha Pahn West he is SUKKAL.MAH SUK[KAL ...šu]šim.
- [16](#) Sirukduh was himself DUMU NIN₉ of Silhaha.
- [17](#) A seal bears the name of its founder, Kidinu “king of Susa and Anshan”.
- [18](#) This name appears also on a cylinder seal from Haft Tappeh (HT 567).
- [19](#) Appearance of the logogram EŠŠANA for “king”.
- [20](#) Two dedications on statues are in Akkadian (MDP 53 3–4).

- [21](#) The inscription on the statue of his wife Napir-asu (CRS 83) is also in Elamite (EKI 16).
- [22](#) The designation of the temple is varied, whether it specifies its innovative character (“... (the temple of Upurkubak) that the kings, my predecessors, had not built in Susa ...”), the material (cf. IRS pp. 152–154), the place (“on the Acropolis”). The name is sometimes provided (*aštam* dedicated to Pinigir, *ain kuten* “House of Justice”, *kukunnum* “Upper Temple”, *nūr kibrat* “(tower-temple) Light of the World”, *sir halte, ipillati*). In Dur-Untaš other terms are attested: *siyan hunin*, *siyan kinin*, *siyan silin*, *siyan limin*, *siyan likrin*.
- [23](#) For example, IRS 23: “I, Untaš-Napiriša, son of Humbanumena, the king of Anshan and Susa, I built the temple of DN”.
- [24](#) “... so that, (prince) always satisfied throughout the years, I may have a continually prosperous kingship” (IRS 27), “... eager (that) my life (may be) continually prosperous, so that the extinction of my lineage, (when it will be) judged², may not be inflicted to me” (IRS 28) or, with another combination of the elements: “... eager (that) my life (may be) continually prosperous, (prince) always satisfied throughout the years” (IRS 29).
- [25](#) “... (I built a temple) to the god DN who answers my prayer for me when I pray and fulfills (it) when I utter a word ...” (IRS 30), “the sanctuary having been provided² with ritual offerings², (the god) blessed the shrine” (IRS 26).
- [26](#) “... may the work that I did be accepted by DN as an offering from me” (IRS 25), “... may I perform the divine service in the temple that I built” (IRS 29), “... may I, for (my) devotion, equally obtain happiness throughout nights and days” (IRS 31).
- [27](#) A version in the same tenor exists also in Elamite (MDP 41 2).
- [28](#) Dedications on stone or bronze objects are known also in Akkadian (MDP 41 VI – VIII), as well as the one added on a statue taken as booty by Untaš-Napiriša, who curses whoever would carry it away, but allows a future king of Elam to place it where he wishes (MDP 10 85 and Pl. 10). In another inscription (EKI 9IIIb) he specifies that the successor who would renovate his work had to replace his name.
- [29](#) Inscriptions, usually short, are also attested on statues carved in Elam (e.g. MDP 53 11–12) or brought to Susa as booty and sometimes reinscribed (e.g. EKI 20–27, CRS 111–112), as well as on other objects (MDP 53 8 and 11–12); see also Henkelman 2010: 494b – 495a, §1.4.
- [30](#) In the same spirit, he placed at the beginning of one of his texts the copy of an inscription in the name of a SUKKAL.MAH who preceded him in the royal function some centuries earlier (IRS 49).
- [31](#) In IRS 48 the emphasis is on this aspect: “... to Kiririša, lady of the one of the *kizzum*, lady-creator of the origins, to Inšušinak, lord of the *kizzum*, creator of the origins for the princes of my line, protector who *determines* the/my name”.
- [32](#) IRS 49: “... O Kuk-Kirwaš, deceased prince, may you wait for Inšušinak as intercessor”.
- [33](#) Furthermore, an inscription (MDP 53 15) on bricks found at Susa and Chogha Pahn West (Stolper 1978: 89–91) omits Temti-tur-kataš, one of his sons. To add to the complexity of this family puzzle, in some variants of another inscription (IRS 50) the name of Hutelutuš-Inšušinak is absent.
- [34](#) Išnikarab-huhun, his sister, follows immediately in the chronological list.
- [35](#) Objects with dedication: for example, CRS 140, MDP 53 25.
- [36](#) A standard inscription (IRS 55) and a simple dedication to Išnikarab (IRS 56).
- [37](#) The translations of the Achaemenid inscriptions follow Lecoq 1997. In their sigla, the first letter refers to the name of the king (A¹: Artaxerxes I; A²: Artaxerxes II; A³: Artaxerxes III; Am: Ariaramnes; As: Arsames; C: Cyrus; D: Darius I; D²: Darius II; X: Xerxes); the second letter represents the place of discovery (B: Bisotun or Babylon; E: Elvend; H: Hamadan;

M: Pasargades; N: Naqsh-e Rostam; P: Persepolis; S: Susa, V: Van; Z: Suez).

[38](#) AmH, AsH, DPd, DPe, DSa, DSb, DSL, DSp, DSs, DSt, DSz, XH, XPl, XSc, D²Ha, D²Sa, A²Hb, A²Hc, A²Sb, A²Sc, A³Pa, A³Sc.

[39](#) Some vases bear short labels in Egyptian.

[40](#) Even if, contrarily to the earlier periods, these are not temples, which were absent from Persian cult.

References

- André, B. and Salvini, M. 1989. Réflexions sur Puzur-Inšušinak. *Iranica Antiqua* 24: 54–78.
- Anthonioz, S. and Malbran-Labat, F. 2013. Approche historique and philologique du titre royal ‘likame/we rišakki’. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*, Mémoires de la Délégation en Perse 58. Leiden – Boston: Brill, 417–428.
- Boucharlat, R. 1998. L’Iran au 1^{er} millénaire avant J. C.: Recherches iraniennes récentes. *ISIMU. Revista sobre Orient Proximo y Egipto en la antigüedad* 1: 143–155.
- Daneshmand, P. and Abdoli, M. 2015. A New King of Susa and Anshan. *Cuneiform Digital Library Bulletin* 2015/1, 6 pp.
- Harper, P.O., Aruz, J. and Tallon, F. (eds.) 1994. *La cité royale de Suse*, French revised edition by A. Caubet. Paris: Réunion des Musées nationaux.
- Henkelman, W.F.M. 2008. From Gabae to Taoce: the geography of the central administrative province. In: Briant, P., Henkelman, W.F.M. and Stolper, M.W. (eds.) *L’archive des Fortifications de Persépolis. État des questions et perspectives de recherches*, Persika 12, Paris: Éditions de Boccard, 303–316.
- . 2010. Šilhak-Inšušinak. In: *Reallexikon der Assyriologie* 12: 492–495.
- König, F.W. 1965. *Die elamischen Königsinschriften*, Archiv für Orientforschung, Beiheft 16. Graz.
- Lambert, M. 1972. Hutelutush-Inshushinak et le pays d’Anzan. *Revue d’Assyriologie et d’Archéologie Orientale* 66: 61–76.
- Lecoq, P. 1997. *Les inscriptions de la Perse achéménide*, L’aube des peuples. Paris: Gallimard.
- Malbran-Labat, F. 1995. *Les inscriptions royales de Suse*. Paris: Réunion des Musées Nationaux.
- McCall, B. 2013. Re-assessing Elamite Highland Boundaries: New Evidence for the Middle and Neo-Elamite Periods in the Mamasani Valleys, South-Western Iran. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*, Mémoires de la Délégation en Perse 58. Leiden – Boston: Brill, 191–205.
- Mofidi-Nasrabadi, B. 2005. Eine Steininschrift des Amar-Suen aus Tepe Bormi (Iran). *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 95: 161–171.
- Potts, D.T. 2016. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*, 2nd ed. (1st edition 1999). Cambridge: Cambridge University Press.
- Sollberger, E. and Kupper, J.-R. 1971. *Inscriptions royales sumériennes et akkadiennes*, Paris.
- Steve, M.-J. 1967. *Tchoga Zanbil (Dur Untash) III. Textes élamites et accadiens de Tchoga Zanbil*, Mémoires de la Délégation archéologique en Iran 41. Paris: Librairie Orientaliste Paul Geuthner.

- . 1987, *Nouveaux mélanges épigraphiques, inscriptions royales de Suse et de la Susiane*, Mémoires de la Délégation archéologique en Iran 53. Nice: Editions Serre.
- Stolper, M.W. 1978. Inscribed fragments from Khuzistan. *Cahiers de la Délégation Archéologique Française en Iran* 8: 89–91.

Further Reading

- Edzard, D.O. and Renger, J. 1980. Königsinschriften. In: *Reallexikon der Assyriologie* 6: 59–76.
- Grillot, F. and Vallat, F. 1984. Dédicace de Šilhak-Inšušinak à Kiririša. *Iranica Antiqua* 19: 21–29 and Pl. I–III.
- Kozuh, M. 2014. Elamite and Akkadian Inscribed Bricks from Bard-e Kargar (Khuzistan, Iran). In: Kozuh, M., Henkelman, W.F.M., Jones, C.E. and Woods, C. (eds.) *Extraction & Control. Studies in Honor of Matthew W. Stolper*, Studies in Ancient Oriental Civilization 68. Chicago, IL: The Oriental Institute of the University of Chicago, 131–161.
- Lafont, B. 2001. Inscriptions royales. In: Joannès, F. (ed.) *Dictionnaire de la Civilisation Mésopotamienne*. Paris: R. Laffont, 410–412.
- Lambert, M. 1970. Une inscription de Kutir-Nahhunte. *Journal Asiatique* 258: 243–246.
- . 1978. Disjecta membra Aelamica (II). *Arts Asiatiques* 34: 3–27.
- Vallat F. 1970a. Table élamite de Darius Ier. *Revue d'Assyriologie et d'Archéologie Orientale* 64: 97–107.
- . 1970b. Fragments de Suse. *Revue d'Assyriologie et d'Archéologie Orientale* 64: 171.
- . 1971. Deux nouvelles 'chartes de fondation' d'un palais de Darius Ier à Suse. *Syria* 68: 53–59.
- . 1972a. Deux inscriptions élamites de Darius Ier (DSf et DSz). *Studia Iranica* 1: 3–13 and Pls. I–III.
- . 1972b. Une statue de Darius Ier à Suse. *Journal Asiatique* 260: 247–251.
- . 1972c. Épigraphie achéménide. *Cahiers de la Délégation Archéologique Française en Iran* 2: 203–217.
- . 1974a. Les textes cunéiformes de la statue de Darius. *Cahiers de la Délégation Archéologique Française en Iran* 4: 161–170.
- . 1974b. L'inscription trilingue de Xerxès à la porte de Darius. *Cahiers de la Délégation Archéologique Française en Iran* 4: 171–180.
- . 1974c. La triple inscription cunéiforme de la statue de Darius Ier (DSa). *Revue d'Assyriologie et d'Archéologie Orientale* 68: 157–166.
- . 1978. Une brique élamite de Hutelutush-Inshushinak. *Cahiers de la Délégation Archéologique Française en Iran* 8: 97–107.
- . 1979. Les inscriptions du palais d'Artaxerxès II. *Cahiers de la Délégation Archéologique Française en Iran* 10: 145–154.
- . 1980. Documents épigraphiques de la Ville Royale I (1972 et 1975). *Cahiers de la Délégation Archéologique Française en Iran* 11: 135–139.
- . 1981a. Un fragment de brique de Tépé Bormi inscrit en élamite. *Cahiers de la Délégation Archéologique Française en Iran* 12: 193–196.
- . 1981b. L'inscription de la stèle d'Untash-Napirisha. *Iranica Antiqua* 16: 27–33.
- . 1983. Les briques élamites de Deylam. In: Koch, H. and MacKenzie, D.N. (eds.) *Kunst, Kultur und Geschichte der Achämenidenzeit und ihr Fortleben*, Archäologische Mitteilungen aus Iran, Ergänzungsband 10. Berlin: Dietrich Reimer

Verlag, 11–18.

———. 1990. Deux inscriptions royales en élamite de l'époque des Epartides (sukkalmah). *Nouvelles Assyriologiques brèves et utilitaires*, 1990/137, 112–113.

Yoyotte, J. 1972. Les inscriptions hiéroglyphiques de Darius et l'Égypte. *Journal Asiatique* 260: 253–266.

———. 1974. Les inscriptions hiéroglyphiques de la statue de Darius à Suse. *Cahiers de la Délégation Archéologique Française en Iran* 4: 181–183.

CHAPTER TWENTY-FOUR

Elamite administration



Gian Pietro Basello and Grazia Giovinnazzo

In order to explain the matter treated in this chapter, the word “administration” and the adjective “Elamite” firstly require clarification. According to the *Concise Oxford English Dictionary*, “administration” has at least two different meanings: 1) “the organization and running of a business or system” and 2) “the government in power” (*Concise Oxford English Dictionary*, 11th edition, s.v. administration). In what follows, the term administration takes these two meanings together, that is, it is defined as the management of a state from a practical, organizational (not political) point of view. A state is the institution which leads, controls, and provides a means of self-identification to communities sharing a politically unified territory (cf. the definitions reported in Scheidel 2013). States were created as centralized administrations (Yoffee 2005: 26), and administration is a constitutive element of a state, which would otherwise be a different form of socio-political aggregation (Trigger 2003: 195–196).

An administration is needed when an institution has reached a certain degree of complexity. Surely there were, before the adoption of writing, and still there are, small-scale administrations where writing was not known or used, relying on a pyramid scheme of control and arranging commodities according to fixed patterns established in advance (e.g. associating them to agents using mnemonic devices), but only to a very limited extent. Broadly speaking, if we have written documents, we have an administration. From this point of view, administration is a synonym of bureaucracy, that is, a system where paperwork is used to track what is going on. In this way, we can connect the above-mentioned definition of administration to the starting points of historical research, the extant administrative corpora from the past. The material evidence of offices, archives, and storerooms is rarely attested and used, while metatextual or paratextual data derived from seal impressions or the formal characteristics of textual carriers (usually tablets) have been increasingly studied in the last decades.

Administration provides auxiliary services needed to run an institution (a state or a private organization). First of all, it could manage the inbound and outbound flow of resources (e.g.

food and clothing) needed to sustain workers partially or completely dependent on the institution (including administration employees) or living on its shoulders (e.g. the king and his family, the elite, and courtiers). Then administration could manage the inbound and outbound flow of goods (including raw materials and precious objects for keeping in treasury) and tools needed to equip all the workers and employees (including weapons for the army), build and maintain infrastructures (e.g. facilities, depots, fortresses, roads, canals, and dams), and display power (e.g. rituals, feasting, and banqueting). Written documents both account for human and material resources and record who is responsible for them, ensuring accountability in order to prevent robberies or frauds.

An administration requires a hierarchy of officials, a decision-making chain, means of communication, shared protocols for transferring commodities, a structured space (corresponding to an administrative topography), and a calendar. Sometimes these features surface in the written documentation, though usually in exceptional cases, because there was no need for elucidating common practices.

The administration of a political entity controlling a wide range of territories was actually built by several autonomous regional centers, in most cases originating from different pre-existing administrative traditions which were retained with some adjustments, growing as the time passed by. The expansion of an administrative center was limited technologically by the time required for a message to go to and fro between one of its remotest local units, with a speed that – at that time – could not be faster than that of its human carrier (unless a system of beacons or pigeon post was in use).

The focus of an administrative document is on accounting and accountability, that is, to keep track of quantities and commodities but also, at the same time, of officials who had responsibility over them. To pursue these aims, the scribe had to record also the involved people (often referring to them in groups by their occupation, ethnicity, and/or leader), places, and time. Besides economy, this could feed data to other research fields like onomastics and prosopography, toponymy and historical geography, chronology and history of science (for timekeeping).

Regarding the definition of “Elamite”, here it refers to documentation found in Susiana, Anshan, and – theoretically – the intermontane valleys in between, not necessarily in Elamite language only. The extant corpora matching these requirements are the product of the following administrations, serving different political entities and therefore resulting from different administrative needs and practices:

- the administration of Susa around 3000 BCE, which expressed itself using Proto-Elamite writing. It is possible that written evidence in Proto-Elamite coming from other sites around the Iranian plateau represents local instances of the same administrative system, at least in a broad way. Due to the uncertainties in the understanding of this writing and

the related language, it will not be taken into account in what follows (see J. Dahl, Chapter 19 in this volume);

- the Old Akkadian administration of Susa, a branch of the Old Akkadian administrative system based in Mesopotamia, whose records were written in Old Akkadian language. The Ur III dominion surely established a branch of its administration in Susa, but the few extant documents dated or datable to this period, written in Sumerian, are scattered across several publications and still need a thorough reassessment to provide a general picture of this foreign administration (De Graef 2005: 91–99; 2013: 268–269; 2015: 292–294, §9.3.2–3). Two fragmentary administrative texts (M-129 and M-1654) in Sumerian were found in Tall-e Malyan (Stolper 1982: 57, n. 52; cf. Reiner 1972);
- the administration of the polity (the so-called Sukkalmah kingdom) established in the first half of the 2nd millennium with Susa as the main political center, whose documents were probably written only in Babylonian until ca. 1400 BCE. About 1400 tablets in the Babylonian dialect of Susa pertain to private law (contracts, loans, adoptions, etc., probably kept in a public institution), but there were also many economic documents attesting a purely Mesopotamian organization (De Graef 2013: 272; see Peyronel, Chapter 11 in this volume); some 930 texts were discovered during the early excavations (1890s–1930s) and are published in Scheil 1908: 14–80, 1930, 1932, 1933: 1–102, and 1939: 37–161, and Dossin 1927, nos. 67–235; about 500 tablets were found in the Ville Royale during Ghirshman’s excavations (1950s–1960s), 86 of which are published in De Graef 2006. Some properly administrative corpora are represented by the tablets from Haft Tappeh in Susiana, dated to the last part of the period. Little is known about the textual typologies of the unpublished Babylonian documents from Tall-e Malyan (De Graef 2013: 272); according to Matthew W. Stolper (1976: 90, §2, and 95, sub c; 1982: 57, n. 52) they are just two school texts (M-498 and M-924);
- the administration of the polities established in the first half of the 1st millennium having Anshan and Susa as administrative centers and Elamite as the administrative language. The two extant corpora are dated to the start and end of the period: the tablets from Tall-e Malyan from the beginning of the 1st millennium, that is, the end of the Middle Elamite period, and the tablets from the Acropolis of Susa from ca. 600, possibly even later, that is, very close to the Achaemenid period. It is difficult to state if they were expressions of the same political entity;
- the Achaemenid administration of Fars, whose documents were written in Elamite and Aramaic. The two related corpora are the Persepolis Fortification and the Persepolis Treasury tablets; isolated findings outside Persepolis add further relevant data about the system, which has to be integrated with comparisons to other Achaemenid administrations outside Fars (e.g. the Aramaic documents from Bactria published in Naveh and Shaked 2012).

Surely there were other administrative corpora pertaining to the above-mentioned administrations and also to other, still unknown, systems and polities. The list above shows great gaps both in time and space. First of all, nearly nothing is known of the Sukkalmah administrative system, even if administrative tablets are known among the legal documents in Old Babylonian; furthermore, there is proof, both from Mesopotamia and Susa, of diplomatic exchanges with Hammurabi and Zimri-Lim during the reign of Siwepalarhupak, “governor of Elam” (EKI 3:5), which must have been supported by a chancellery (Charpin 2013). Later in the 2nd millennium, it seems unlikely that a complex like Chogha Zanbil, the ancient Al Untash-Napirisha, was built without the support of a specific administrative branch that took care of the food for the workers and the materials (especially the precious ones) required for construction and furnishings.

From the list above, another peculiarity appears, that is, the use of different languages. This is not surprising over such a wide span of time and space, but in the Achaemenid administration of Persepolis, multilingualism is attested also in a same period and place. This, again, could be expected in a state controlling many lands and peoples. However, it is possible that multilingual administrations were also active previously in Susa, where Elamite and Akkadian seem to be equally attested, even if with a different timing.

The political frame in which the above-mentioned administrations operated was also very different: the Old Akkadian administration in Susa was dependent on and in strict relationships with the Old Akkadian state. The Achaemenid administration of Fars was also part of a broader system, even if in this case it was at the core of the state. The other administrations in Susiana and Anshan appear to be more genuinely Elamite, but we do not know how these administrations would have defined themselves from an ethnic and cultural point of view.

The inclusion of the Achaemenid administration of Persepolis here is justified not only by the use of Elamite language but also by strong similarities in palaeography and administrative formulae with the Susa Acropolis tablets, so that it is possible to consider the Persepolis administration as a legacy of the previous Elamite administrative system, with changes and developments due to the enlarged context (Basello 2011). However, these changes seem to be more in terms of quantity (i.e. in the numbers of managed resources and involved persons) than in quality (different procedures).

Private administration documents are also present in the record of Susa, for example, the archives of the Ur III scribe Igibuni (De Graef 2005) and later, of Ashishi (De Graef 2006, chapter VIII.B), both from Ville Royale Chantier B. Their connections with the state-led administrations (both in actual relationships and in similarity of practices) require further investigation, bearing in mind that the public-private dichotomy, as it is conceived today, is not directly applicable to the ancient Near Eastern polities (Garfinkle 2005). Conversely, it should be recalled that the ancient Near Eastern state was steered by the king as a privately

owned company at least partly dependent on his estates and revenues, even if the king alone could embody a state only symbolically: he needed an elite (including his kin) to share the power and subjects. The legislative, executive, and judicial powers were distributed between the king and the elite. The administration lies somewhat across these powers, since it is needed to manage each different branch of a state, such as the court and the army.

Administrative corpora

Susa old Akkadian tablets

Approximately 90 Akkadian and Sumerian tablets dated or datable to the Old Akkadian period were found at different locations in the Acropolis of Susa during the excavation campaigns of 1898–1910 (Scheil in Legrain 1913) and were published by Legrain (1913) in cuneiform copy and transliteration (some also in photogravure). Another tablet (TS/Ac 32) was found in the 1966 excavations (Steve and Gasche 1971: 80 and 198, transliteration on p. 13, cuneiform copy on Pl. 11:26, photo on Pl. 98:2; Foster 2016: 73). These tablets are similar in palaeography to the Akkadian ones found in Eshnunna and other Mesopotamian cities (Foster 1982) under the Old Akkadian dominion. Old Akkadian administrative textual typologies like household income and receipt documents are also attested. The orthographic and linguistic evidence of these texts is taken into account in the treatment of Old Akkadian in Hasselbach 2005.

The texts, economic and juridical in content (De Graef 2013: 264), are partly official records of the Old Akkadian administration in Susa (e.g. MDP 14 47 and 51) and attest to the existence of a self-sustaining Akkadian enclave which may have been called Dur-Agade (“Fort Akkad”), under the direction of an Akkadian governor (Foster 2016: 73), with a military garrison and close economic contacts with southern Babylonia and Diyala (see Steinkeller, Chapter 10 in this volume).

Thanks to personnel lists, we know that the administration managed more than a thousand individuals: the ruling elite (including the governor), courtiers and administrators (including scribes, a diviner, attendants of the palace), the skilled labor force (artisans, cooks, barbers, one seal cutter, carpenters, smiths, leather workers, fullers, reed workers, and arrow makers), and unskilled laborers (divided into the usual Mesopotamian categories of fitness for work, including women, girls, and babies) (Foster 2016: 73). As recipients of food, there were “supervisors of laborers, slaughterers, craftsmen, the officer in charge of the palace gate, a messenger and runner, a herald, soldiers, elders, and various foreigners”, while expenditures went also for offerings to deities (Foster 2016: 73).

Although relatively small in comparison to other Akkadian estates, the governor’s

household was about 450 ha, labored by a workforce bearing mostly Sumerian or Akkadian names. This suggests that the enclave was self-sustainable and not dependent on land lease or levy as elsewhere (Foster 2016: 74).

Toponyms like Shuruppak, Sumer, Surgul, Uru'a, and Apishal are mentioned in the tablets, as well as places in Iran like Anshan. Travelers from Dilmun, Magan, and Meluhha are also attested, substantiating the role of Susa as a commercial hub towards the east.

Some documents are related to Sumerian merchant families holding fields at Susa (e.g. MDP 14 19, 21); a tablet lists transactions with barley, wool, and copper purchased or valued in silver (Foster 2016: 74). There are also some school exercises, signlist fragments, and an incantation (MDP 14 91). Unfortunately, it is not possible to know the find-spots of these texts and therefore if, however improbable, the different typologies and groups were found together in a primary deposition of archival type. Even if the number of documents is relatively small, they attest a wide range of administrative typologies, dealing with raw materials, field production, food rations, and personnel.

The Old Elamite texts dated to the Old Akkadian period, that is, two school or incantation tablets (Lambert 1974) and the so-called Treaty of Naram-Suen (Hinz 1967), represent a very good match in palaeography, suggesting the establishment of a school in Susa where it was possible to learn Mesopotamian cuneiform writing.

Taken as a whole, the tablets dated or datable to the Old Akkadian period from Susa point to the existence of an Old Akkadian administration and school, largely employed by and dealing with Mesopotamian expatriates, in addition to some smaller-scale private administrations of foreign (Sumerian) entrepreneurs. At the same time, someone was also writing in Elamite using Old Akkadian cuneiform, therefore assuring the existence of an Elamite cultural tradition, even if – according to the extant evidence – not applied to administrative records.

Haft Tappeh Babylonian tablets

During the excavations led by Negahban in the years 1965–1979, “Several thousand complete and fragmentary tablets” were found at Haft Tappeh (probably the ancient site of Kapnak, less than 20 km south of Susa) (Negahban 1991: 103). About 300 tablets have been published, mainly in cuneiform copy (out of 619 texts copied by Pablo Herrero according to Herrero and Glassner 1990: 1; cf. Herrero and Glassner 1996: 51: “nous nous proposons ici de présenter ... la suite et la fin des copies de P. Herrero”): 10 tablets (and one envelope) in cuneiform copy and transliteration (with a commentary) in Herrero 1976, the others in cuneiform copy with a usually short commentary in Herrero and Glassner 1990 (including a stela fragment [no. 1] and an inscribed spool [no. 3]), 1991 (including four tablet fragments from Abu Fandowa [nos. 160–163], a site 1 km north-west of Haft Tappeh), 1993 (with an appendix of remarks and

corrections to the cuneiform texts published in Negahban 1991), and 1996 (including one tablet fragment from Abu Fandowa [no. 290]); a further, stray, tablet is in Beckman 1991. The texts are broadly categorized according to their content by Glassner: construction of chariots (Herrero and Glassner 1990, nos. 5–13), metalworking (including gold, silver, and bronze objects, nos. 14–70), lists of anthroponyms (Herrero and Glassner 1991, nos. 71–80), dated or sealed tablet and envelope fragments (nos. 81–88); fragments with accounts (nos. 89–159), clothing (Herrero and Glassner 1993, nos. 164–185), livestock and animals (nos. 186–205), a juridical document (no. 206), a omen text (207), practical texts (Herrero and Glassner 1996, nos. 208–267), school and lexical texts (nos. 268–290) (four texts from Abu Fandowa are grouped together in Herrero and Glassner 1991, nos. 160–163). Seals and seal impressions (found also on bullae) are treated in Negahban 1991: 49–101 and Amiet 1999. A general treatment with remarks on chronology is in Glassner 1991.

Many of the tablets were found together in three distinct groups: the trench H XXXI in the northern part of the Terrace Complex I, the courtyard in front of the artist's workshop of the Terrace Complex I, and in Haft Tappeh B mound opposite the railroad station (Negahban 1991: 103). The onomasticon is mostly Elamite; month-names are also Elamite (Herrero 1976: 93–94). Some texts are dated internally with day, month-name, and year-name. Year-names mentioning messengers to and from Babylonia, and the defeat of Kadashman-Enlil (a name borne by two Cassite kings) testify to military conflicts and economic relationships with Cassites (Reiner 1973: 94–97, §5; Herrero 1976: 93; Glassner 1991: 119 and 125–126; Carter 1999: 118).

Thanks to the archaeologist's eye of Negahban, we know that the tablets were usually made "from a fine, well levigated clay which might have been mixed with a small portion of natural bitumen or other additive which changed its color ... These ingredients were kneaded to make a flexible patty ..." (Negahban 1991: 103). Negahban remarked that rectangular and "disk-shaped" (lenticular) tablets were found, corresponding to different textual typologies: letter orders, "economic texts", school texts (on lentils), texts of extispicin, auguries, and omens. To Negahban's list, mathematical tablets must be added (listed in Robson 2008: 330, table B.17). Even if only the first two categories pertain to administration, the tablets from Haft Tappeh represent the more typologically varied corpora from Elam. Unfortunately, the find-spot of each tablet is not provided in the publications, so we do not know if administrative tablets were found together with school texts and other textual typologies. In this case, the narrow link between administration and scribal school could be emphasized, confirming that the school trained scribes to write both administrative and literary documents, or that administration training included the literary curriculum.

In recent years, in the framework of the Iranian-German excavations led by Mofidi-Nasrabadi at the site since 2005, new tablet discoveries were made in Areal I (ca. 200 m south-west of the previously excavated area) in a building with storerooms which has been

interpreted as administrative: ca. 30 tablets from room 1 in 2005, ca. 30 tablets from room 5 and ca. 50 tablets from room 12 in 2007 (Prechel 2010: 51 and 56). A sample of four tablets is published in Prechel 2010. These texts are administrative in character; some are inventory lists related to weapons and riding equipment (see Mofidi-Nasrabadi, Chapter 12 in this volume). They are similar to the other administrative tablets found in the previous excavations, even if they seem to pertain to some other administrative department (as shown, e.g., by the tablets from Room 1 which are not sealed and do not bear dates; Prechel 2010: 51). Prechel has read a tablet mentioning an item, *watwat* (perhaps an Elamite term formed by a reduplicated base), known also from a group of previously found tablets related to the construction of luxurious chariots, probably to be used by the king or for some ritual function (Prechel 2010: 51).

Room 1 in the administrative building in Areal I has been identified by Mofidi-Nasrabadi as the workroom of the scribes (Mofidi-Nasrabadi 2012b): a small channel in the floor could have served the purpose of discharging the water used to mould and keep tablets wet while writing; the tablets were found in an ash layer on the floor along the walls; they were probably kept on shelves of tamarisk wood, whose burned remains were also found; a stone mortar was possibly used to crush and refine clay for tablets (Mofidi-Nasrabadi 2012b: 750–752). The dating of these tablets should be nearly coeval to the destruction of the building, being the tablets in use at its moment of demise. The subsequent campaigns have also brought to light some other tablets (Mofidi-Nasrabadi 2012a and 2014). When published, these tablets, together with their detailed find-spot data and archaeological context, will permit a deeper understanding of Haft Tappeh's administration and, possibly, its relationships with the Susa administration in the first half of the 2nd millennium.

Tall-e Malyan EDD tablets

The Middle Elamite period is especially represented at Tall-e Malyan, the ancient city of Anshan, in the Operation EDD where a large burned building with a central courtyard (10 × 14 m) surrounded by rooms and corridors was brought to light on the highest part of the mound (Stolper 1984a: 1–3; Carter 1996). During the excavation campaigns in the years 1972–1974, on the floor and between the collapsed walls of the burned level (IVa) in the sectors A and B (plan in Stolper 1984a: 4, Figure 3), 246 inscribed fragments and tablets were found. They probably formed a compact group, since fragments from the floor and the collapse were able to be joined in at least three instances (Stolper 1984a: 5). 111 tablets and large fragments, ca. half of the 200 original tablets, are published in Stolper 1984a. Three stray tablets, similar to EDD level IV documents, are published in Stolper 2003. Most of the tablets are small and cigar-shaped (Stolper 1984a: 16).

The texts are administrative documents (except for fragments TTM 1 100–102, lacking a date formula, which perhaps are master copies of royal inscriptions; Stolper 1984a: 18) dealing

with the disbursal and control of metals (copper or bronze, gold and silver) to be used to fashion objects whose names, when they can be understood in some way, point to architectural ornaments (including perhaps wall knobs) and furnishings (Stolper 1984a: 10–13). Stolper split them according to a “gross classification” in “single-issue memoranda”, “multiple and serial issues”, “dispatches”, and “summary and tabular texts”. Single and multiple issue memoranda seem to be related to an outward movement of goods and supplies within a local administration (Stolper 1984a: 13), while the dispatches seem to record movements to and from destinations outside the organization (Stolper 1984a: 16). The texts are dated internally by month name and day number.

In 1976, from the burned level but in a different sector (H) of the building, another group of tablets (34 tablets and fragments labelled as M-1461 and following numbers; Stolper 1984a: 5) was discovered, mostly in bad shape. This group differs from the first by content: it is not related to metal but to the transfer of livestock, hides, and foodstuffs (Stolper 1984a: 3). One tablet from this group (M-1471) is published in Stolper 2013 together with two more of particular interest (see below).

Some other tablets (listed in Stolper 1984a: 3–5), more or less similar in size and content to the other two groups, come from other sectors of the building. Among these is M-603 (published in Stolper 2013), a tablet from the reoccupation level (IIIa) constituted by a domestic complex built over the burned wall remains (Carter 1996: 39–42); it is similar in palaeography to the tablets from the burned level so, even if it is different in content (Stolper 1984a: 5), its find-spot was probably the result of a secondary deposition (Stolper 2013: 400). The third tablet published in Stolper 2013 is M-1157.

From a palaeographical point of view, the tablets are much closer to Neo-Elamite than Middle Elamite writing; the same is true if one considers the attested inventory of signs (Stolper 1984a: 21). In orthography, the use of *broken writing*, typical of Achaemenid Elamite, is rare (Stolper 1984a: 20).

The pottery found on the floor of level IVa is similar to that of Susa Ville Royale II level 10, which is dated to the end of the Middle Elamite period (c. 1000 BCE) (Stolper 1984a: 5–6; Carter 1996: 29). The lower limit for the dating of the tablets is represented by the burning that destroyed the building, baking the tablets. According to Stolper, the tablets were written between 1300 and 1000 BCE, most probably in the last third of this interval, just before the fire (Stolper 1984a: 9). Steve considered them as the first Neo-Elamite corpus (Neo-Elamite I A; Steve 1992: 21), due to the similarities to Neo-Elamite documents in palaeography and language. The writing of the Persepolis Achaemenid tablets seems to be a development from the Malyan tablets, which can be considered as the first documents showing a clear advancement towards the simplification of the signs, reducing the number of wedges and their possible arrangements.

Susa Acropolis tablets (SAT)

The Susa Acropolis tablets represent a homogeneous corpus, counting 299 published tablets found in 1900 during the French excavations led by Jacques de Morgan. According to Morgan and Scheil, the tablets were found a few metres to the south of the chapel of Shutruk-Nahunte II, beneath a structure leaning against the interior facade of the Achaemenid wall of the Acropolis (Basello in press). It is not clear if the Acropolis wall had a military or a supporting function (probably both), or if it rested on some analogous pre-Achaemenid structure. The Acropolis tablets can be dated to the first half of the 6th century BCE (ca. 590–ca. 555), as proposed by Tavernier on historical and orthographical grounds (Tavernier 2004: 39; see also Basello 2011: 62, n. 5).

The corpus is represented by MDP 9 1–298 published by Scheil in 1907 plus MDP 11 309 (similar to MDP 9 1–298 but apparently coming from a different, unmentioned, find-spot). Hundreds of tiny fragments kept in the Louvre storerooms are still unpublished. MDP 9 88 has been considered related to the so-called Nineveh letters (Hinz 1986: 227; transliteration and translation in Hinz 1986: 231). The tablets were re-edited in Jusifov 1963 with a different numbering. MDP 9 34 is treated by Stolper in Harper et al. 1992: 267–269, catalogue no. 188. MDP 9 11 has been recently collated in Henkelman 2011a: 606–609. Tablets dealing with products received by gods are discussed in Basello 2017, §4. The seal impressions still await a full publication and have still to be connected to tablets; in the meantime, see Amiet 1973: 6–12 and Pls. I–IV, nos. 1–16, and Garrison 2002; the seal impressed on MDP 9 165 is discussed in Basello 2013: 256–257 and photos on p. 264, Figs. 3–5.

The tablets usually record the delivery of (military?) clothing, weaponry, and containers to several individuals and groups of people (identified through a shared anthroponym or toponym). While the delivering institution should be a department of the royal administration in Susa, sometimes the receivers appear to be autonomous groups, as in the cases of the *puhu Samati-p* “inhabitants of Samati” (MDP 9 94:rev.11; literally “Samatian sons”), whose kings are known from the Kalkmakarra inscriptions, or three different groups of *Parsa-p* “Persians” (e.g. MDP 9 11:rev.1–2). While it remains difficult to define precisely the relationships linking these groups to the power in Susa, the obvious interpretation suggests a kind of contract or alliance where military equipment and weapons were provided to ensure allegiance if not specifically military support.

The structure of the texts is more homogeneous than the Persepolis Fortification tablets and follows roughly a common pattern, usually closed by the date formula and a toponym:

- (1) a list of quantities, products, and involved people;
- (2) PAP (*h*)*uta-k* (usually transcribed *huttukki*) “total manufactured? (items)”;
- (3) *kur-ma-n* PN-*na* “under the responsibility of PN” (PN = personal name);

- (4) a verbal form, mainly *(h)uma-k-a* “withdrawn?” or *li(-)p-k-a* “delivered?”. Few other verbs are attested in alternative;
- (5) the date formula (usually only the month name);
- (6) a toponym (usually preceded by the place classifier AŠ).

In most of the texts, the same official, Kutakaka, was acknowledged as the person in charge (*kur-ma-n*) for the administrative operation, assuring a certain compactness of space and time to this corpus which can be considered an archival unit.

Persepolis fortification tablets (PFT)

More than 20,000 tablets and fragments were found in the north-eastern tower of the fortification wall of the terrace of Persepolis in 1933 during the excavations led by Ernst Herzfeld on behalf of the Oriental Institute of Chicago, where they were sent afterwards on study loan. The find-spot has been described in differing ways (see Basello in press, §1.1, for a full reassessment). Certainly tablets were found high above the floor in a “small room” on the ground floor (Herzfeld 1941: 226); according to Herzfeld this room was walled up, and indeed a one-brick thick sealing wall, still standing ca. 1 m high with respect to the floor of the adjacent corridor, could be guessed at in the few excavation photographs (e.g. Photographic Archives of the Oriental Institute P. 24771 published in Basello in press, Figure 6). Both Herzfeld (quotation in Schmidt 1957: 5, n. 11) and Krefter (1979: 23 and quotation in Henkelman 2008: 71) mentioned also tablets above the remnants of stairs, which should not be the stairway leading to the upper storey, but a few steps leading to a loophole recess in the corridor in front of the “small room”. This could account for the mention of “two little archive chambers” (i.e. the “small room” and the corridor with the steps) in one of the first lectures on the subject by Herzfeld ([Anonymous] 1934: 231, probably compiled using the text read by Herzfeld). However, the tablets on the steps probably led Herzfeld to think that they had fallen down from the upper storey where “the office of the guards” was housed, while maintaining the “small chamber” as a dead archive downstairs (Herzfeld 1941: 226). In Wouter F.M. Henkelman’s words, the tablets with “immediate bureaucratic relevance” were kept apart, while the older ones, which “retained a certain legal function (accountability)”, were deposited in the “small room” (Henkelman 2013: 530). The field number is the only extant way to attempt a reconstruction of the original arrangement of the tablets.

The Persepolis Fortification tablets are internally dated to the regnal years 13–28 (509–493 BCE) of an unnamed king who was surely Darius I, being mentioned in a few tablets (e.g. Fort. 6764 published in Cameron 1942 and Henkelman 2010). A total of 15,000 or more original documents in Elamite, of which 6,000–7,000 are still at least partially legible and meaningful (Henkelman 2013: 531; cf. Jones and Stolper 2008: 43) has been estimated. About

2,400 texts have been published to date (Henkelman 2013: 531), most of which in Hallock 1969 (2,087 tablets; PF 1–300 were sent back to the National Museum of Iran in 2004 [Henkelman 2013: 530]), 1978 (33 tablets), and Arfaee 2008a (153 tablets originally read by Cameron, 151 sent back from Chicago in 1948 and two found in later Iranian excavations at Persepolis, now in the National Museum of Iran [Tehran], plus ca. ten tablets that surfaced there; see Henkelman 2008: 76, n. 170; cf. Arfaee 2008a: v; reviewed in Schmitt 2010). Further tablets are published in Cameron 1942, Henkelman 2003, 2008: 384–415 and 455–463, 2010, 2011b–d, Henkelman et al. 2006, Henkelman and Stolper 2009, Stolper 2015, and Azzoni and Stolper 2015 (see also Henkelman 2008: 76, n. 171). A large group of 2,551 tablets circulating among scholars in a handwritten transliteration by Hallock is set to be published by Henkelman (Henkelman 2008: 75–7). PFT-like Elamite tablets which were probably part of the same discovery but later scattered (Henkelman 2008: 77, and n. 174) are published in Grillot 1986, Vallat 1994, and Jones and Stolper 2006 (see the section “Isolated tablets” below).

As an archive, the tablets depict a complex administrative scenario, dealing with “the intake, storage, and notably the redistribution of locally produced food commodities” (barley, wine, beer, livestock, etc.) for individuals and groups (male and female workers, officials, members of the royal family, travellers, etc.), and also animals (Henkelman 2013: 530). Most of the tablets are single-issue memoranda, but there are also many letter orders and journals. Several administrative typologies (labelled with letters from A to W, including further numerical indexing in some cases) were recognized by Hallock according to the managed commodities and the structure of the text (Hallock 1969: 13–69; see the comments interspersed in Azzoni and Stolper 2015: 9–12 and footnotes). Some of them deserved special attention, like the Q texts related to travel rations (e.g. Giovinazzo 1994a and 1994b).

The memoranda are usually tongue-shaped (straight on the left and rounded on the right), with two strings emerging from the upper and lower ends of the left side; the external tract of the strings had burnt or perished leaving two small holes in the clay. The two strings were actually knotted together inside the tablet, which was then moulded around the knot. Both were evidently sections of a longer string that had either been wrapped around something, or had served as a means of suspension (see Henkelman 2008: 154–161, §2.5.5.2 for a full reassessment). Journals are written on large rectangular tablets (Jones and Stolper 2008: 29–33).

The seal impressions have been partly published in Garrison and Root 2001, besides many other publications by Mark B. Garrison (see Garrison, Chapter 32 in this volume).

The language of the Elamite tablets shows the influence of Old Persian in lexicon and syntax (besides a largely Iranian onomasticon), so strong that Ilya Gershevitch considered it as an alloglottography of Old Persian (see the reassessment in Rossi 2006: 78–82). However, while some fixed patterns of correspondences can be singled out, the large number of variations suggests a case of heavy linguistic interference, as can be expected in a bilingual

socio-cultural context (Henkelman 2011a: 588–595). Not all the documents are in Elamite: besides 259 Aramaic epigraphs (usually a single or a few words, numbers, or a date) among about 6,200 Elamite tablets and fragments examined (Azzoni and Stolper 2015: 4–5), ca. 800 tablets are monolingual Aramaic, written in ink or incised (Azzoni 2008). Aramaic (which could be written even after a tablet had become completely dry and hardened; cf. Abrahams and Coulon 2009: 13 on hieratic epigraphs in ink on some Amarna letters) was evidently integrated into the bureaucratic system, while isolated tablets in Phrygian, Greek, and Old Persian remain oddities in the framework of a “general literacy”, unless they are just the “tip of the iceberg” (Stolper and Tavernier 2007; see also Tavernier 2008). The only Babylonian tablet in the Persepolis Fortification archive is a legal text (Stolper 1984b).

The first tablet to be published, Fort. 6764 (in Cameron 1942; see also Henkelman 2010), dated to March–April 503 BCE, is a letter order that presents in a very useful way the chain of command leading to a transaction in favour of one of the princesses of the royal house. Parnaka, most probably the director of the Persepolis administration, instructed Ariana to issue 100 sheep from the estate (*ulhi*) of the king to the princess Artystone. Parnaka stresses three times that this order came directly from the king. The very fact that the chain of command is stated in the text confirms its exceptional character, probably connected to the origin of the order, that is, the king in person. The tablet is dated by year and month, as is usual in the Persepolis Fortification tablets; a few are dated also by the day. A colophon closes the text, providing the names of the scribe and of the mail carrier, probably for accountability purposes.

Even if the Persepolis fortification has preserved thousands of administrative tablets, there is no doubt that other Achaemenid administrative corpora have been lost or still lie waiting underground at Persepolis, not to mention other centres of Fars and Khuzestan. The Persepolis Fortification tablets hardly recorded any commodities other than foodstuff. It is highly probable that another group of administrative tablets dealt with metal and/or wood products. PF 335, an isolated “tools” text, is the only extant exemplar pertaining to this group (Basello 2011: 75–78, §2.4.2), probably mistakenly filed with the food ration texts represented by the Persepolis Fortification archive. In structure and lexicon PF 335 is completely different from the other Fortification tablets. The commodities are unknown to us, except for *like*, a term which may point to wall knobs (Basello 2012).

The digitization of the whole corpus in the framework of the Persepolis Fortification Archive Project (<<https://oi.uchicago.edu/research/projects/persepolis-fortification-archive>>) directed by Stolper will pave the way for new researches based on numerical and statistical analyses, for example, calculating the volume of commodities managed and the number of workers involved over the years in order to estimate the size and developments of the Persepolis economy, an example of a system based on a newly founded royal city.

Persepolis Treasury tablets (PTT)

The Persepolis Treasury tablets were found in the north-eastern part of the so-called Treasury of Persepolis, mainly in a burned layer above the floor of the columned room 33, during the Oriental Institute excavations led by Erich F. Schmidt in the years 1936–1938 (Schmidt 1957: 4–5 and Figure 2 in between). Their distribution suggests that they were kept in the upper floor and fell down during the conflagration of the building (see also Cahill 1985: 380). The clusters of tablet pieces found on the ramp 25 and stairway 49 also point to an archival deposition on the upper floor (Schmidt 1957: 5). According to Schmidt (1957: 4), 198 tablets and large fragments, 548 smaller fragments, and a number of chips and flakes were found. 138 tablets and fragments were published by George G. Cameron in one monograph (Cameron 1948 [PT 1–84]; PT 10 is updated in Arfaee 2008b) and two articles (Cameron 1958 [PT-1957 1–5] and 1965 [PT-1963 1–20]); the rest are still unpublished. PTT were divided between the National Museum of Iran (Tehran) and the Oriental Institute Museum (Chicago). Very good photographs (obtained with the method described in Cameron 1948: viii) of the tablets in Chicago were published in the plates of Cameron 1948, but the seal impressions (placed on the left side, see below) were not visible since the focus was on the cuneiform text. A further fragment, curiously the first, isolated, tablet to be found at Persepolis but subsequently forgotten, is published in Jones and Yie 2011.

Most of the tablets are tongue-shaped and moulded around a knotted string emerging from the clay at the two ends of the left side, like PFT. The contents are generally longer and the tablets larger than the single-issue memoranda of PFT. The wedges are clearly impressed and the signs generally well-spaced.

PTT dealt with (partial) payments in silver, sometimes in lieu of food rations (in sheep, wine, beer, barley), generally to groups of specialized craftsmen (Hallock 1960: 90–91; Henkelman 2013: 534). The exchange rate of silver/foodstuff and the different amounts for different workers were also provided. The person responsible for the apportionment (*šara-ma-n-a*) seems to be the actual executor. There are two types of documents: letter orders and memoranda. Letters were addressed to the so-called Treasurer (*kapnuški-r*) at Persepolis, requesting payments in silver; memoranda state that a payment has been made. Another typology is represented by PT 4–8 and PT 81–84 which clearly report a different administrative operation, recording huge amounts of silver given to individuals generally bearing Persian names, sometimes by command of king Darius. Only these tablets seem to be related to Persian high officials and, maybe, to soldiers (see the occurrences of *tašup* ‘army’ in PT 84).

The work period covered by the payment is given in months and regnal year. The name of the king is not provided in the date formula, but through prosopographical reasoning (Cameron 1948: 32–34) it was possible to date the tablets from the 30th regnal year of Darius I to the 7th of Artaxerxes I (not all regnal years in between are attested), that is, from 492 to 457 BCE.

All the texts recording silver paid in lieu of barley (about half of the published tablets) are dated to an eight-month period (December/January 467 to July/August 466) where the exchange rate of barley to silver grew from 1/30 shekel per quart of barley to 1/4 shekel. Something could have happened in this period, maybe a barley shortage which prevented the administration from paying the entire wage in kind, requiring the institution managing silver (*kapnuški*, e.g. in PT 27:5–6, usually translated “Treasury”) to provide it. These supplementary payments in silver may be considered extraordinary, while the silver payments in lieu of wine and sheep are numerically less relevant and evenly distributed in time with a constant rate, representing the usual business (Cahill 1985: 381). However, as remarked by Jones and Yie (2011: 11–12 and n. 7), this could be due to the usual fluctuation of the silver/barley rate during the winter months before the barley harvested in May and June becomes available. This kind of interpretative error, where the extant data is considered exceptional even if there is no comparative data, could be called “positivist fallacy”.

Almost all the tablets are sealed, but only with one seal per tablet (Garrison and Root 2001: 33), belonging to the official who authorized and ordered the operation, that is, the sender in the case of a letter. The seals are cylinder seals mostly carved in the so-called “court style” and therefore reflecting the social status of the officials operating in Persepolis (Garrison and Root 2001: 34).

One hundred ninety-nine sealed clay bullae and tongue-shaped anepigraphic tablets were also found in the Treasury (Schmidt 1957: 5–7 and Figure 3, called generically “labels”); the find-spots coincide partly with the tablets (room 33 and adjacent areas) but not exclusively, so they were not necessarily related to PTT even if clearly a product of the same administrative system. They are formed as lumps of clay wrapped around strings that were tied to objects, bearing four to six different seal impressions (Schmidt 1957: 6). The clay was shaped in different ways, possibly corresponding to the category of object to which they were attached. Certain shapes and seal impressions were found only in specific rooms, suggesting the existence of patterns in the distribution of stored goods (Cahill 1985: 381).

One rectangular tablet in Babylonian (PT 85 in Cameron 1948) was found together with PTT, dealing with taxation. It seems to be rather different both for its language and function.

PTT were concerned with low-level administration and did not involve taxes or gifts, but wages of workers in the Persepolis area (Cahill 1985: 381). With respect to PFT, PTT represent a more homogeneous archive. Handwriting is less differentiated, suggesting that they were all drafted in Persepolis. Some officials (e.g. Ashbazana) attested in PFT reappear in PTT, remaining active through many years; four seals are attested both on PFT and PTT (Garrison and Root 2001: 33). The name of Hintamuka (Hipurukka in Cameron 1948) appears as that of a scribe both on PFT and PTT (e.g. PF 1182:15 and PT 1:21). Henkelman (2013: 534) stressed that PTT represent a different branch of administration, not a subsequent, new way of remunerating workers.

A complete reassessment of the Treasury material is needed, providing detailed analysis of the relationships between clay bullae and tablets, correlating find-spots, seal impressions, and shapes. Moreover, as suggested by Garrison and Root (2001: 34), the examination of the undersides of bullae may provide clues to their usage, while the analysis of clay may provide data on the locales of production.

Isolated tablets

Isolated administrative documents are represented by MDP 36 2 (one of the three Elamite tablets from the Ville des Artisans in Susa), MDP 28 468 (probably Achaemenid according to Stolper 2004: 63, §1.2.4.1; see also Waters 2000: 100), BM 56302 (published in Walker 1980; “a Late Elamite administrative tablet, registered as coming from Sippar, Babylonia” according to Walker 1980: 79), and a tablet from Chogha Mish (in appearance similar to the Susa Acropolis tablets; Delougaz and Kantor 1996: 17 and Pl. 5.K; see Henkelman 2008: 78, n. 176).

Some other Elamite administrative tablets (one published in Grilhot 1986, two in Vallat 1994 [now in the Bibel+Orient Museum of Fribourg; see also Basello 2012], and nine in Jones and Stolper 2006 [formerly part of the Erlenmeyer collection]) are similar to the Persepolis Fortification tablets in every respect and can therefore be considered as discovered together during the Oriental Institute excavations and later scattered. YBC 16813 (published in Jones and Stolper 1986) and the Qasr-e Abu Nasr tablet (published in Henkelman et al. 2006) are different in their seal impressions and other details like orthography, lexicon, and onomastics, suggesting that they originated in other Achaemenid administrative centres. More relevant are the two fragments of PFT-like tablets from Old Kandahar in southern Afghanistan (Fisher and Stolper 2015) which seem to attest the existence of a PFT-like archive there.

Administrative textual typologies

Usually an administrative corpus – its survival being the result of chance – does not represent the whole administration but a branch of it within a limited span of time. One of the aims of the study of an administrative corpus is to answer the following question: why were these documents written? This question may be better framed through another, probably unanswerable, question: what was *not* written because its recording was not useful or required by the system? The answer to the first question would be only the first step towards the understanding of administration as a system. A further step would be to define the system as an ancient administrator did, that is, to recognize the different administrative departments, their hierarchical organization, the name and functions of the involved officials, the standard procedures, the administrative terminology, and the issues at stake in a diachronic perspective.

An administrative corpus could provide useful data to estimate the (minimum) size of the

administration that produced it. Size could be measured by evaluating the quantities of resources by unit of time and the number of individuals working in or served by the administration. Some administrative corpora are focused on a specific category of commodities (e.g. food rations, clothing, weapons, or raw materials) while others managed different commodities together. The scope of an administrative corpus is another relevant parameter in the reconstruction of the related administration, because it provides clues about what was considered homogeneous and therefore to be treated together, what was considered different and therefore treated separately by other departments (being difficult or unuseful to manage together), and what did not pertain to the administration and therefore was not treated at all. The wider the scope, the smaller the size of the administration, at least in most cases. For example, the scope of the Susa Acropolis tablets is wider than that of the Persepolis Fortification tablets, which are focused only on food rations, but there is little doubt that the Persepolis archive was much broader in size (the extant tablets and fragments are ca. 70 times more than those from Susa), showing many more administrative typologies.

The archival context of a corpus has to be evaluated by considering if its find-spot was a primary deposition or a secondary one (i.e. a dump); in the first case, the archive could be running or dead at the moment of its end (Garrison and Root 2001: 26–29, focused on the Persepolis Fortification tablets); if it was running, its end must have been abrupt.

An administrative corpus is broadly defined by unity of find-spot; rarely is it defined also by unity of administrative typology. The different administrative typologies are usually reconstructed by modern scholars studying the texts, generally evaluating their content and structure, and neglecting other formal characteristics of the document (size, shape, etc.). Therefore, modern classifications, while being useful tools to understand the texts, usually do not correspond to the ancient ones, which remain largely unknown. Nor is it possible to reconstruct the original arrangement of the documents on shelves, baskets, and so on for the administrative corpora from Elam, due to the lack of proper archaeological data and also because some corpora were probably not in a primary deposition context. An exception is represented by a small group of anepigraphic tablets found in a jar on the Kuh-e Rahmat fortifications at Persepolis (Garrison and Root 2001: 34; cf. Henkelman 2013: 534–535); another discovery of tablets in jar, mentioned by Mécquenem, is unfortunately undocumented (De Graef 2005: 91–92).

Sometimes it is possible to distinguish economic documents (related to the management of resources) from strictly administrative documents (related to the management of officials and common people working in the administration), but this distinction does not seem to be productive since both kinds of documents have been usually found together in the extant corpora. It seems more appropriate to distinguish between corpora dealing with material or human resources, and between corpora related to transactions (inbound and outbound) or accumulation of commodities (represented by lists or inventories). The distinction between

administrative and legal (contracts, loans, adoptions, testaments; e.g. the tablets from the Apadana of Susa MDP 11 301–307, the witness list published in Scheil 1928: 40–42, Fort. 11786 published in Stolper 1984b) documents is clearer, at least to us.

The category of managed commodities is the key element distinguishing one administrative department from another. A further functional distinction could usually be recognized by evaluating the place of the written document into the chain of the administrative process related to a given transaction. Authorizations (usually in the form of letter orders) preceded the transaction, while memoranda followed it. Letter orders are standard administrative texts framed in a letter, that is, starting with a standard opening formula mentioning first the addressee and then the sender (Basello 2011, §2.2.1); here the focus is on communication, usually between a high official (the sender) and the official who has direct access to some resources. Memoranda can be distinguished as single-issue or multiple-issue memoranda (Azzoni and Stolper 2015: 5–6, both focused on the Persepolis Fortification tablets; see Henkelman 2008: 102, fn. 228 for the use of this term). Multiple issue memoranda are characterized by unity in one or, generally, more of the following categories (which are provided only once in the whole text): place, time, commodity, involved people, or officials. It is relevant to the understanding of the administration system to single out which of these categories are usually considered unity factors. Memoranda should be written immediately (even during) or shortly after the transaction and could be distinguished from recap documents (also called “journals”), written much later on rectangular oversized tablets. Recap tablets are made by copying and putting together several memoranda, again according to some unity factor, usually much broader than multiple-issue memoranda (e.g. a period of a year). In the rare case where both the recap tablet and one or more related memoranda are extant (e.g. PFa 29 reproducing PF 1677, PF 1080, and PF 1011), it is useful to check if some details provided in the memoranda are omitted in the recap (e.g. the recap tablet PFa 29 which adds detail to the memoranda PF 1011).

Administrative documents are usually dated internally (Basello 2002; Basello 2011, §2.2.2, focused on the Persepolis Fortification tablets). The presence of regnal year, month, and/or day is relevant to the understanding of the scope of the archive and therefore of its function. For example, the indication of the month without year (e.g. in the Malyan EDD tablets and in the Susa Acropolis tablets), reflects an archive having a limited scope in time, unless the tablets were copied later in multiple-issue memoranda related to single years, or the tablets themselves were collected in baskets or shelves labelled by a given year. In any case, a system which records systematically the year also in single-issue memoranda (e.g. the Persepolis Fortification tablets), has to be more complex and more focused on accountability and therefore responsibility in the administration process.

Further typologies of administrative documents are represented by written labels (e.g. MDP 9 2 and 293) and bullae (also called “sealed anepigraphic tablets”), some of which share the

tongue shape of the Persepolis memoranda. This practice is known also in Mesopotamia: for example, in the Nuzi archives or in the Middle Assyrian tablets from Ashur (Garrison and Root 2001: 30, n. 88; Stein 1993: 34, n. 113). The Neo-Assyrian administrative documents related to textiles show string traces, too: see especially SAA 7 93 (dated to 658 BCE) that, beside the characteristic holes at the left corners, has the same shape as the Persepolis tablets; Mario Fales and Nicholas Postgate remark that the text unusually runs along the longitudinal axis of the tablet (Fales and Postgate 1992: 108, n. 93; photo on Pl. V; see also p. XXVI, “Textiles”), which is the only direction known in the Persepolis memoranda. From Haft Tappeh, we have sealed clay envelopes which were moulded around knobs probably used to seal doors (Ferioli and Fiandra 1979: 310–311 and Figs. 4–6).

Usually the language of an administrative corpus is technical and formulaic (see Basello 2011, focused on the Persepolis Fortification tablets). The actual character of a transaction or of the role of an official may be disguised in formulaic expressions, which can rarely be understood through etymological means. Therefore, exceptions are most relevant to understand the system, since they reveal the point at which the formulaic language is no longer adequate to express what has to be communicated (see Basello 2011, §2.4, focused on the Persepolis Fortification tablets). As an example, one can mention the exceptional addition in tablets PF 2067 and PF 2068 (dated to the same day, 6th June 500 BCE), where the introduction of a new seal of Parnaka is detailed. This leads us to consider the inherent presence of anomalies and mistakes, possibly due also to frauds. Administrative systems are far from being perfect machines. So scholars have to take into account also their limits and deficiencies. Rarely we have letters dealing with anomalies of the system mixed with personal issues (see Joannés 2009 from a Mesopotamian point of view).

Concluding remarks

All the corpora examined above seems to pertain to a relatively local scope, for example, they are not concerned with the administration of far provinces. Conversely, the Old Akkadian tablets from Susa are related to a colonial presence maintaining strong relationships with Mesopotamia. Unfortunately, except for some unpublished tablets related to the international correspondence of Siwepalarhupak, we have nothing to tell us about the branches of administration pertaining to relationships with other polities. The army seems to be represented both in Haft Tappeh and Susa, while cultic provisions are known from Persepolis (see Henkelman, Chapter 39 in this volume) and temple institutions are probably mentioned in the Susa Acropolis tablets.

The language switch from Akkadian to Elamite around 1400 BCE may be a ghost phenomenon, that is, the result of a positivist fallacy. It is possible that other corpora in Elamite had existed before and in Akkadian afterwards.

Even if administrative language is formulaic and metaphorical, in the case of corpora in the Elamite language, it has to be paired with the study of language. This will lead to a better understanding of the Elamite language (including morphology, syntax, and lexicon).

It is therefore hoped that in the future:

- the publication of the Malyan, Susa, and Persepolis tablets will be completed at least in the digital domain;
- photos (not to speak of RTI and 3D images) of most of the tablets will be available at least in the digital domain;
- an integrated study of the texts, their physical carriers (size, shape, etc.), and seal impressions will be performed;
- quantitative and statistical studies will be carried out, especially on the Persepolis Fortification tablets which are the most numerous corpus and are generally dated by year;
- • clay analysis of the tablets, to be compared with samples taken in the main coeval sites around Susa, Persepolis, and so on will be carried out. This is particularly relevant for the Persepolis Fortification tablets, many of which were probably fashioned and drafted outside Persepolis in local administrative centers in the intermontane plains between Susa and Persepolis, especially the Marvdasht, Mamasani, and Pasargadae plains;
- palaeographical analysis of the tablets, aiming at the singling out of the hands of the scribes, will be carried out;
- comparisons (including sealing practices, text carrier size and shapes, etc.) with Neo-Assyrian, Neo-Babylonian, and also Achaemenid practices in Babylonian documents from Mesopotamia will be exploited.

From what has been discussed above, it is clear that a monolithic “Elamite administration” or an “Elamite administrative system” or “practice” never existed. Notwithstanding this, the relative scarcity of extant sources has prompted here a collective treatment, hoping that in the future the interconnections between the corpora (and therefore between the administrations) will be better outlined.

Abbreviations

- MDP 9 Administrative tablets from the Acropolis of Susa published in Scheil 1907 and also in Jusifov 1963 (according to another numbering; correspondences in Jusifov 1963: 261).
- MDP 11 Elamite inscriptions and tablets published in Scheil 1911.

- MDP 28 Tablets published in Scheil 1939.
- MDP 36 Elamite tablets published in Paper 1954.
- PF Persepolis Fortification tablets published in Hallock 1969.
- PFa Persepolis Fortification tablets published in Hallock 1978.
- PT Persepolis Treasury tablets published in Cameron 1948.
- SAA 7 Neo-Assyrian administrative tablets published in Fales and Postgate 1992.
- TTM 1 Elamite tablets (mainly administrative) from Tall-e Malyan published in Stolper 1984a.

References

- Abrahami, Ph. and Coulon, L. 2009. De l'usage et de l'archivage des tablettes cunéiformes d'Amarna. In: Pantalacci, L. (ed.) *La lettre d'archive. Communication administrative et personnelle dans l'Antiquité proche-orientale et égyptienne. Actes du colloque de l'université de Lyon 2 9–10 juillet 2004*, Bibliothèque générale 32 = TOPIOI Orient – Occident, Suppl. 9 (2008). Lyon: Institut français d'archéologie orientale, Le Caire, 1–26.
- Álvarez-Mon, J. and Garrison, M.B. (eds.) 2011. *Elam and Persia*. Winona Lake, IN: Eisenbrauns.
- Amiet, P. 1973. La glyptique de la fin de l'Élam. *Arts Asiatiques* 28: 3–32 and Pls. 1–11.
- . 1999. Le sceaux de Kabnak (Haft Tappeh). In: Alizadeh, A., Majidzadeh, Y. and Malek Shahmirzadi, S. (eds.) *The Iranian World. Essays on Iranian Art and Archaeology presented to Ezat O. Negahban*. Tehran: Iran University Press, 101–113.
- [Anonymous] 1934. Notes of the Quarter. Recent Discoveries at Persepolis. *Journal of the Royal Asiatic Society of Great Britain and Ireland*, 226–232.
- Arfaee, A. 2008a. *Persepolis Fortification Tablets. Fort. and Teh. Texts* (according to the English title-page), Ancient Iranian Studies Series 5. Tehran: The Centre for the Great Islamic Encyclopedia (in English and Persian).
- . [Arfa'i, A.M.] 2008b. PT 10a, Collated and Completed. ARTA 2008.001 (Mars 2008), 8 pp., www.achemenet.com/document/2008.001-Arfai.pdf.
- Azzoni, A. 2008. The Bowman MS and the Aramaic Tablets. In: Briant et al. 2008: 253–274.
- Azzoni, A. and Stolper, M.W. 2015. From the Persepolis Fortification Archive Project, 5. The Aramaic Epigraph *ns(y)h* on Elamite Persepolis Fortification Documents. ARTA 2015.004 (Juillet 2015), 88 pp., www.achemenet.com/document/ARTA_2015.004-Azzoni-Stolper.pdf.
- Basello, G.P. 2002. Elam and Babylonia: The Evidence of the Calendars. In: Panaino, A. and Pettinato, G. (eds.) *Ideologies as Intercultural Phenomena*, Melammu Symposia 3. Milano: Università di Bologna – Istituto Italiano per l'Africa e l'Oriente, 13–36.
- . 2006. Old Persian in Elamite: The Spellings of Month-Names. In: Panaino, A.C.D. and Piras, A. (eds.) *Proceedings of the 5th Conference of the Societas Iranologica Europæa held in Ravenna, 6–11 October 2003*, 1, *Ancient & Middle Iranian Studies*. Milano: Mimesis, 19–38 and Pls. I–IV.
- . 2011. Elamite as Administrative Language: From Susa to Persepolis. In: Álvarez-Mon and Garrison 2011: 61–88.

- . 2012. Eine Wirtschaftsurkunde aus der Festung von Persepolis, 1. Jahrtausend v. Chr. In: Steymans, H.U. and Staubli, T. (eds.) *Von den Schriften zur (Heiligen) Schrift. Keilschrift, Hieroglyphen, Alphabete und Tora*. Freiburg: BIBEL+ORIENT Museum Freiburg (CH) – Katholisches Bibelwerk Stuttgart, 74–76.
- . 2013. From Susa to Persepolis: The Pseudo-Sealing of the Persepolis Bronze Plaque. In: De Graef and Tavernier 2013: 249–264.
- . 2017. Of Gods and Men in the Persepolis Bronze Plaque. In: Henkelman, W.F.M. and Redard, C. (eds.) *Persian Religion in the Achaemenid Period/La religion perse à l'époque achéménide*, Classica et Orientalia 16. Wiesbaden: Harrassowitz, 347–383.
- . in press. Administrative Topography in Comparison: Overlapping Jurisdiction between the Susa Acropole Tablets and the Persepolis Fortification Tablets. In: Tavernier, J., Abraham, K., Boschloos, V. and Gorris, E. (eds.) *Topography and Toponymy in the Ancient Near East: Perspectives and Prospects*, Publications de l'Institut orientaliste de Louvain 71. Louvain.
- Beckman, G. 1991. A Stray Tablet from Haft Tépé. *Iranica Antiqua* 26: 81–83.
- Briant, P., Henkelman, W.F.M. and Stolper, M.W. (eds.) 2008. *L'archive des Fortifications de Persépolis. État des questions et perspectives de recherches. Actes du colloque organisé au Collège de France par la " Chaire d'histoire et civilisation du monde achéménide et de l'empire d'Alexandre " et le " Réseau international d'études et de recherches achéménides " (GDR 2538 CNRS), 3–4 novembre 2006*, Persika 12. Paris: Éditions de Boccard.
- Cahill, N. 1985. The Treasury at Persepolis: Gift-Giving at the City of the Persians. *American Journal of Archaeology* 89/3: 373–389.
- Cameron, G.G. 1942. Darius' Daughter and the Persepolis Inscriptions. *Journal of Near Eastern Studies* 1: 214–218.
- . 1948. *Persepolis Treasury Tablets*, Oriental Institute Publications 65. Chicago, IL: The University of Chicago Press.
- . 1958. Persepolis Treasury Tablets Old and New. *Journal of Near Eastern Studies* 17: 161–176.
- . 1965. New Tablets from the Persepolis Treasury. With Contributions by I. Gershevitch. *Journal of Near Eastern Studies* 24: 167–192.
- Carter, E. 1996. *Excavations at Anshan (Tal-e Malyan): The Middle Elamite Period*, University Museum Monograph 82 = Malyan Excavation Reports 2. Philadelphia: The University Museum of Archaeology and Anthropology, University of Pennsylvania.
- . 1999. Kabnak (Haft Tappeh) and Al Untash-Napirisha (Chogha Zanbil): Elamite cities of the Late Bronze Age. In: Alizadeh, A., Majidzadeh, Y. and Malek Shahmirzadi, S. (eds.) *The Iranian World. Essays on Iranian Art and Archaeology presented to Ezat O. Negahban*. Tehran: Iran University Press, 114–130.
- Charpin, D. 2013. "Ainsi parle l'empereur". À propos de la correspondance des *sukkal-mah*. In: De Graef and Tavernier 2013: 341–353.
- De Graef, K. 2005. *Les archives d'Igibuni. Les documents Ur III du chantier B à Suse*, Mémoires de la Délégation Archéologique en Iran 54. Gand: Université de Gand.
- . 2006. *De la dynastie Simaški au Sukkalmahat. Les documents fin PE IIB – début PE III du chantier B à Suse*, Mémoires de la Délégation Archéologique en Iran 55. Gand: Université de Gand.
- . 2013. The Use of Akkadian in Iran. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*, Oxford – New York:

- Oxford University Press, 263–282.
- . 2015. Susa in the Late 3rd Millennium: From a Mesopotamian Colony to an Independent State (MC 2110–1980). In: Sallaberger, W. and Schrakamp, I. (eds.) *History & Philology*, Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean (ARCANE) 3. Turnhout: Brepols, 289–296.
- De Graef, K. and Tavernier, J. (eds.) 2013. *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*, Mémoires de la Délégation en Perse 58. Leiden – Boston: Brill.
- Delougaz, P. and Kantor, H.J. 1996. *Chogha Mish Volume I. The First Five Seasons of Excavations 1961–1972*, edited by A. Alizadeh, Oriental Institute Publications 101. Chicago, IL: The Oriental Institute of the University of Chicago.
- Dossin, G. 1927. *Autres textes sumériens et accadiens*, Mémoires de la Mission Archéologique de Perse 18. Paris: Librairie Ernest Leroux.
- Fales, F.M. and Postgate, J.N. 1992. *Imperial Administrative Records, part I. Palace and Temple Administration*, State Archives of Assyria 7. Helsinki: Helsinki University Press.
- Ferioli, P. and Fiandra, E. 1979. The Administrative Functions of Clay Sealings in Protohistorical Iran. In: Gnoli, G. and Rossi, A.V. (eds.) *Iranica*, Series Minor 10. Napoli: Istituto Universitario Orientale, 307–312 and Pls. XVI–XXI.
- Fisher, M.T. and Stolper, M.W. 2015. Achaemenid Elamite Administrative Tablets, 3. Fragments from Old Kandahar, Afghanistan. ARTA 2015.001 (Janvier 2015), 27 pp., www.achemenet.com/document/ARTA_2015.001-Fisher-Stolper.pdf.
- Foster, B.R. 1982. Archives and Record-Keeping in Sargonic Mesopotamia. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 72: 1–27.
- . 2016. *The Age of Agade. Inventing empire in ancient Mesopotamia*. London – New York: Routledge.
- Garfinkle, S.J. 2005. Public Versus Private in the Ancient Near East. In: Snell, D.C. (ed.) *A Companion to the Ancient Near East*, Blackwell Companions to the Ancient World. Malden, MA – Oxford: Blackwell Publishing, 406–418.
- Garrison, M.B. 2002. The “Late Neo-Elamite” Glyptic Style: A Perspective from Fars. *Bulletin of the Asia Institute*, n.s. 16: 65–102.
- Garrison, M.B. and Root, M.C. 2001. *Seals on the Persepolis Fortification Tablets*, Volume I: *Images of Heroic Encounter*, Oriental Institute Publications 117, with seal inscription readings by Charles E. Jones. Chicago, IL: The Oriental Institute of the University of Chicago.
- Giovinazzo, G. 1994a. Les documents de voyage dans les textes de Persépolis. *Annali [dell’Istituto Universitario Orientale]* 54: 18–31.
- . 1994b. Les voyages de Darius dans les régions orientales de l’empire. *Annali [dell’Istituto Universitario Orientale]* 54: 32–45.
- . 1995. I ‘puhu’ nei testi di Persepoli. Nuove interpretazioni. *Annali [dell’Istituto Universitario Orientale]* 55: 141–157.
- . 2012. Gli artigiani della pietra a Persepoli. In: Basello, G.P. and Rossi, A.V. (eds.) *DARIOSH Studies II. Persepolis and Its Settlements: Territorial System and Ideology in the Achaemenid State*, Series Minor 78. Napoli: Università degli Studi di Napoli “L’Orientale”, 121–138.
- Glassner, J.J. 1991. Les textes de Haft Tépé, la Susiane et l’Élam au 2ème millénaire, with the collaboration of F. Grillot. In: *Mésopotamie et Élam. Actes de la XXXVIème Rencontre Assyriologique Internationale. Gand, 10–14 juillet 1989*,

- Mesopotamian History and Environment, Occasional Publications 1. University of Ghent, 109–126.
- Grillot, F. 1986. Une tablette achéménide inédite. *Archäologische Mitteilungen aus Iran*, n.F. 19: 149–150.
- Hallock, R.T. 1960. A New Look at the Persepolis Treasury Tablets. *Journal of Near Eastern Studies* 19/2: 90–100.
- . 1969. *Persepolis Fortification Tablets*, Oriental Institute Publications 92. Chicago, IL: The University of Chicago Press.
- . 1978. Selected Fortification Texts. *Cahiers de la Délégation Archéologique Française en Iran* 8: 109–136.
- Harper, P.O., Aruz, J. and Tallon, F. (eds.) 1992. *The Royal City of Susa. Ancient Near Eastern Treasures in the Louvre*. New York: The Metropolitan Museum of Art (also in a French edition revised by A. Caubet: *La cité royale de Suse. Trésors du Proche-Orient Ancien au Louvre*, Paris: Réunion des Musées Nationaux, 1994).
- Hasselbach, R. 2005. *Sargonic Akkadian. A Historical and Comparative Study of the Syllabic Texts*. Wiesbaden: Harrassowitz Verlag.
- Henkelman, W. 2003. An Elamite Memorial: The Šumar of Cambyses and Hystaspes. In: Henkelman, W. and Kuhrt, A. (eds.) *A Persian Perspective. Essays in Memory of Heleen Sancisi-Weerdenburg*, Achaemenid History 13. Leiden: Nederlands Instituut voor het Nabije Oosten, 101–172.
- . 2008. *The Other Gods who are. Studies in Elamite-Iranian Acculturation based on the Persepolis Fortification Texts*, Achaemenid History 14. Leiden: Nederlands Instituut voor het Nabije Oosten.
- . 2010. “Consumed before the King”. The Table of Darius, that of Irdabama and Irtaštuna, and that of his Satrap, Karkiš. In: Jacobs, B. and Rollinger, R. (eds.) *Der Achämenidenhof. The Achaemenid Court. Akten des 2. Internationalen Kolloquiums zum Thema "Vorderasien im Spannungsfeld klassischer und altorientalischer Überlieferungen"*. Landgut Castelen bei Basel, 23. – 25. Mai 2007, Classica et Orientalia 2. Wiesbaden: Harrassowitz, 667–775.
- . 2011a. Cyrus the Persian and Darius the Elamite: a Case of Mistaken Identity. In: Rollinger, R., Truschnegg, B. and Bichler, R. (eds.) *Herodot und das Persische Weltreich. Herodotus and the Persian Empire. Akten des 3. Internationalen Kolloquiums zum Thema "Vorderasien im Spannungsfeld klassischer und altorientalischer Überlieferungen"*. Innsbruck, 24. – 28. November 2008, Classica et Orientalia 3. Wiesbaden: Harrassowitz, 577–634.
- . 2011b. Of Tapyroi and Tablets, States and Tribes: The Historical Geography of Pastoralism in the Achaemenid Heartland in Greek and Elamite Sources. *Bulletin of the Institute of Classical Studies* 54/2: 1–16.
- . 2011c. Xerxes, Atossa, and the Persepolis Fortification Archive. In: Eidem, J. and van Zoest, C. (eds.) *Annual Report 2010*. Leiden – Istanbul, 26–33.
- . 2011d. Parnakka’s Feast: šip in Pārsa and Elam. In: Álvarez-Mon and Garrison 2011: 89–166.
- . 2012. The Achaemenid Heartland: An Archaeological-Historical Perspective. In: Potts, D.T. (ed.) *A Companion to the Archaeology of the Ancient Near East*, Blackwell Companions to the Ancient World. Malden, MA – Oxford – Chichester: Blackwell, 932–962 and shared bibliography.
- . 2013. Administrative Realities: The Persepolis Archives and the Archaeology of the Achaemenid Heartland. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford – New York: Oxford University Press, 528–546.
- Henkelman, W.F.M., Jones, C.E. and Stolper, M.W. 2006. Achaemenid Elamite Administrative Tablets, 2: The Qašr-i Abu Našr Tablet. ARTA 2006.003 (Décembre 2006), 20 pp., www.achemenet.com/ressources/enligne/arta/pdf/2006.003-Stolper-Jones-Henkelman.pdf.
- Henkelman, W.F.M. and Stolper, M.W. 2009. Ethnic identity and ethnic labelling at Persepolis: the case of the Skudrians. In:

- Briant, P. and Chauveau, M. (eds.) *Organisation des pouvoirs et contacts culturels dans les pays de l'empire achéménide. Actes du colloque organisé au Collège de France par la " Chaire d'histoire et civilisation du monde achéménide et de l'empire d'Alexandre " et le " Réseau international d'études et de recherches achéménides "* (GDR 2538 CNRS), 9–10 novembre 2007, Persika 14. Paris: Éditions de Boccard, 271–329.
- Herrero, P. 1976. Tablettes administratives de Haft-Tépé. *Cahiers de la Délégation Archéologique Française en Iran* 6: 93–116.
- Herrero, P. and Glassner, J.-J. 1990. Haft-Tépé: choix de textes I. *Iranica Antiqua* 25: 1–45 (tablets nos. 1–70).
- . 1991. Haft-Tépé: choix de textes II. *Iranica Antiqua* 26: 39–80 (tablets nos. 71–163).
- . 1993. Haft-Tépé: choix de textes III. *Iranica Antiqua* 28: 97–135 (tablets nos. 164–207).
- . 1996. Haft-Tépé: choix de textes IV. *Iranica Antiqua* 31: 51–82 (tablets nos. 208–290).
- Herzfeld, E.E. 1941. *Iran in the Ancient East. Archaeological Studies Presented in the Lowell Lectures at Boston*. London – New York.
- Hinz, W. 1967. Elams Vertrag mit Narām-Sîn von Akkade. *Zeitschrift für Assyriologie* 24: 66–95.
- . 1986. Zu den elamischen Briefen aus Ninive. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta Historiae Elamicae. Mélanges offerts à M. J. Steve*. Paris: Éditions Recherche sur les Civilisations, 227–234.
- Joannès, F. 2009. La lettre d'archive. Essai de synthèse. In: Pantalacci, L. (ed.) *La lettre d'archive. Communication administrative et personnelle dans l'Antiquité proche-orientale et égyptienne. Actes du colloque de l'université de Lyon 2 9–10 juillet 2004*, Bibliothèque générale 32 = ΤΟΠΟΙ Orient – Occident, Suppl. 9 (2008). Lyon: Institut français d'archéologie orientale, Le Caire, 193–198.
- Jones, C.E. and Yie, S. 2011. From the Persepolis Fortification Archive Project, 3. The First Administrative Document Discovered at Persepolis: PT 1971–1971. *ARTA* 2011.003 (Juin 2011), 14 pp., www.achemenet.com/document/2011.003-Jones&Yie.pdf.
- Jones, C.E. and Stolper, M.W. 1986. Two Late Elamite Tablets at Yale. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta Historiae Elamicae. Mélanges offerts à M. J. Steve*. Paris: Éditions Recherche sur les Civilisations, 243–254.
- . 2006. Fortification Texts Sold at the Auction of the Erlenmeyer Collection. *ARTA* 2006.001 (Juin 2006), 22 pp., www.achemenet.com/ressources/enligne/arta/pdf/2006.001.Jones-Stolper.pdf.
- . 2008. How Many Persepolis Fortification Tablets Are There? In: Briant et al. 2008: 27–50.
- Jusifov, Ju.B. 1963. Èlamskie chozjajstvennyye dokumenty iz Suz (i.e. "Elamite economic documents from Susa"). *Vestnik Drevnej Istorii* 84/2: 189–222 and 85/3: 199–261 (in Russian).
- Krefter, F. 1979. Mit Ernst Herzfeld in Pasargadae und Persepolis 1928 und 1931–1934. *Archäologische Mitteilungen aus Iran*, n.F. 12: 13–25 and Pls. 1–7.
- Lambert, M. 1974. Deux textes élamites du III^e millénaire. *Revue d'Assyriologie et d'Archéologie Orientale* 68: 3–14.
- Legrain, L. 1913. Tablettes de comptabilité, etc. de l'époque de la dynastie d'Agadè, with an introduction by V. Scheil, Tablettes de l'époque de la dynastie d'Agadè. In: Scheil, V., *Textes élamites-sémitiques. Cinquième Série*, Mémoires de la Mission archéologique en Susiane 14. Paris: Ernest Leroux, éditeur, 61–131.
- Mofidi-Nasrabadi, B. 2010. *Vorebericht der archäologischen Ausgrabungen der Kampagnen 2005–2007 in Haft Tappeh (Iran)*, with contribution by D. Prechel and R. Vahidzadeh. Münster: Agenda.
- . 2012a. Vorbericht der archäologischen Ausgrabungen der Kampagnen 2008–2010 in Haft Tappeh (Iran). *Elamica* 2: 55–

115, Pls. 1–41, and Plan 1.

- . 2012b. Arbeitszimmer eines Schreibers aus der mittelelamischen Zeit. In: Wilhelm, G. (ed.) *Organization, Representation, and Symbols of Power in the Ancient Near East. Proceedings of the 54th Rencontre Assyriologique Internationale at Würzburg 20–25 July 2008*. Winona Lake, IN: Eisenbrauns, 747–756.
- . 2014. Vorbericht der archäologischen Ausgrabungen der Kampagnen 2012–2013 in Haft Tappeh (Iran). *Elamica* 4: 67–167.
- Naveh, J. and Shaked, Sh. 2012. *Aramaic Documents from Ancient Bactria*. London: Khalili Family Trust.
- Negahban, E.O. 1991. *Excavations at Haft Tepe, Iran*, University Museum Monograph 70. Philadelphia: The University Museum of Archaeology and Anthropology, University of Pennsylvania.
- Paper, H.H. 1954. Note préliminaire sur la date des trois tablettes élamites de Suse. In: Ghirshman, R., *Village perse-achéménide*, Mémoires de la Mission Archéologique en Iran 36. Paris: Presses Universitaires de France, 79–82 and Pl. XXIV.
- Prechel, D. 2010. Die Tontafeln aus Haft Tappeh 2005–2007. In: Mofidi-Nasrabadi 2010: 51–57.
- Reiner, E. 1972. Tall-i Malyān – Inscribed material. *Iran* 10: 177.
- . 1973. Inscription from a Royal Elamite Tomb. *Archiv für Orientforschung* 24: 87–102.
- Robson, E. 2008. *Mathematics in Ancient Iraq. A Social History*. Princeton, NJ – Oxford: Princeton University Press.
- Rossi, A.V. 2006. Ilya Gershevitch, Old Persian and Western Iranian Dialectology. In: Panaino, A. (ed.) *The Scholarly Contribution of Ilya Gershevitch to the Development of Iranian Studies. International Seminar 11th April 2003 Ravenna*, with the contribution of S. Circassia. Milano: Mimesis, 69–84.
- Scheidel, W. 2013. Studying the State. In: Bang, P.F. and Scheidel, W. (eds.) *The Oxford Handbook of the State in the Ancient Near East and Mediterranean*. Oxford – New York: Oxford University Press, 5–58.
- Scheil, V. 1907. *Textes élamites-anzanites. Troisième série*, Délégation en Perse, Mémoires 9. Paris: Ernest Leroux, éditeur.
- . 1908. *Textes élamites-sémitiques. Quatrième série*, Délégation en Perse, Mémoires 10, with the collaboration of J.-E. Gautier. Paris: Ernest Leroux, éditeur.
- . 1911. *Textes élamites-anzanites. Quatrième série*, Délégation en Perse, Mémoires 11. Paris: Ernest Leroux, éditeur.
- . 1928. Sparsim. *Revue d'Assyriologie* 25: 37–49.
- . 1930. *Actes juridiques susiens*, Mémoires de la Mission Archéologique de Perse 22. Paris: Librairie Ernest Leroux.
- . 1932. *Actes juridiques susiens (Suite: n° 166 à n° 327)*, Mémoires de la Mission Archéologique de Perse 23. Paris: Librairie Ernest Leroux.
- . 1933. *Actes juridiques susiens (Suite: n° 328 à n° 395). Inscriptions des Achéménides (Supplément et suite)*, Mémoires de la Mission Archéologique de Perse 24. Paris: Librairie Ernest Leroux.
- . 1939. *Mélanges épigraphiques*, Mémoires de la Mission Archéologique de Perse 28. Paris: Librairie Ernest Leroux.
- Schmidt, E.F. 1957. *Persepolis II. Contents of the Treasury and Other Discoveries*, Oriental Institute Publications 69. Chicago, IL: The University of Chicago Press.
- Schmitt, R. 2010. Zu den Persepolis Fortification Tablets im Iran Bāstān Museum (review of Arfaee 2008a). *Orientalia*, n.s. 79/3: 390–400.
- Stein, D. 1993. *Das Archiv des Šilwa-Teššup, 8, The Seal Impressions*. Wiesbaden: Harrasowitz.

- Steve, M.-J. 1992. *Syllabaire élamite. Histoire et paleographie*, Civilisations du Proche-Orient, Serie II: Philologie 1. Neuchâtel – Paris: Recherches et Publications.
- Steve, M.-J. and Gasche, H. 1971. *L'acropole de Suse. Nouvelles fouilles (rapport préliminaire)*, Mémoires de la délégation archéologique en Iran 46, with the collaboration of A. Caisson. Leiden: E.J. Brill – Paris: P. Geuthner.
- Stolper, M.W. 1976. Preliminary Report on Texts from Tāl-e Malyān 1971–1974. In: Bagherzadeh, F. (ed.) *Proceedings of the IVth Annual Symposium on Archaeological Research in Iran. 3rd – 8th November 1975*. Tehran: Iranian Centre for Archaeological Research, 89–100 and 108–109, photos 1–3.
- . 1982. On the Dynasty of Šimaški and the Early Sukkalmahš. *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 72: 42–67.
- . 1984a. *Texts from Tall-i Malyan I. Elamite Administrative Texts (1972–1974)*, Occasional Publications of the Babylonian Fund 6. Philadelphia, PA: Babylonian Fund of the University Museum.
- . 1984b. The Neo-Babylonian Text from the Persepolis Fortification. *Journal of Near Eastern Studies* 43: 299–310. ———. 2003. Three Stray Elamite Tablets from Malyan. In: Miller, N.E. and Abdi, K. (eds.) *Yeki bud, yeki nabud. Essays on the archaeology of Iran in honor of William M. Sumner*, Monograph 48. Los Angeles: The Cotsen Institute of Archaeology, University of California, 201–206.
- . 2004. Elamite. In: Woodard, R.D. (ed.) *The Cambridge encyclopedia of the world's ancient languages*. Cambridge: Cambridge University Press, 60–94, reprinted also in Woodard, R.D. (ed.) *The ancient languages of Mesopotamia, Egypt, and Aksum*, 47–82 (2008).
- . 2013. *Sugirs* of Anšan. In: De Graef and Tavernier 2013: 399–415.
- . 2015. From the Persepolis Fortification Archive Project, 4. 'His Own Death' in Bisotun and Persepolis. ARTA 2015.002 (Mars 2015), 28 pp., www.achemenet.com/document/ARTA_2015.002-Stolper.pdf.
- Stolper, M.W. and Tavernier, J. 2007. From the Persepolis Fortification Archive Project, 1: An Old Persian Administrative Tablet from the Persepolis Fortification. ARTA 2007.001 (Juin 2007), 28 pp., www.achemenet.com/pdf/arta/2007.001-Stolper-Tavernier.pdf.
- Sumner, W.M. 2003. *Early Urban Life in the Land of Anshan: Excavations at Tal-e Malyan in the Highlands of Iran*, University Museum Monograph 117 = Malyan Excavation Reports 3. Philadelphia, PA: University of Pennsylvania Museum of Archaeology and Anthropology.
- Tavernier, J. 2004. Some Thoughts on Neo-Elamite Chronology. ARTA 2004.003 (Mars 2004), 44 pp., www.achemenet.com/ressources/enligne/arta/pdf/2004.003-Tavernier.pdf.
- . 2008. Multilingualism in the Fortification and Treasury archives. In: Briant et al. 2008: 59–86.
- Trigger, B.G. 2003. *Understanding Early Civilizations. A Comparative Study*. Cambridge: Cambridge University Press.
- Vallat, F. 1994. Deux tablettes élamites de l'Université de Fribourg. *Journal of Near Eastern Studies* 53: 263–274.
- Walker, C.B.F. 1980. Elamite Inscriptions in the British Museum. *Iran* 18: 75–81.
- Waters, M.W. 2000. *A Survey of Neo-Elamite History*, State Archives of Assyria Studies 12. Helsinki: The Neo-Assyrian Text Corpus Project.
- Yoffee, N. 2005. *Myths of the Archaic State. Evolution of the Earliest Cities, States, and Civilizations*. Cambridge: Cambridge University Press.

Part VI

The material culture of Elam



CHAPTER TWENTY-FIVE

Elamite architecture



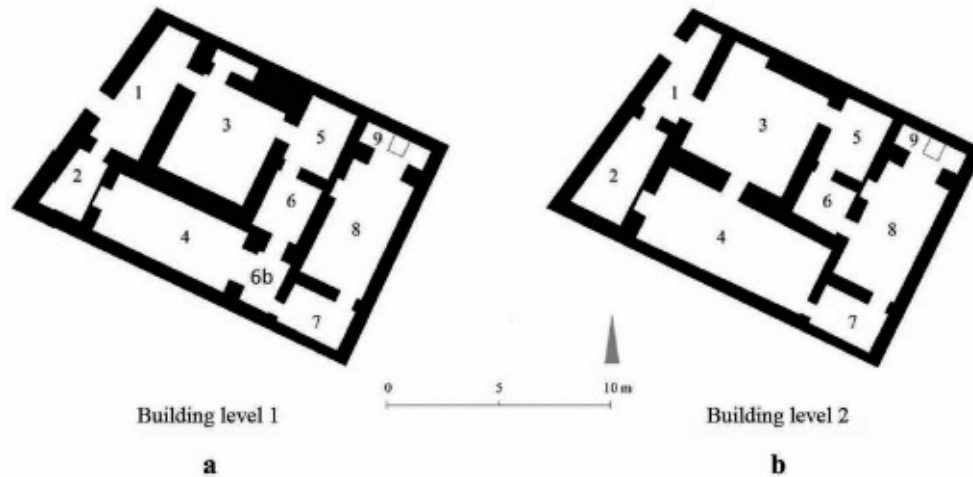
Behzad Mofidi-Nasrabadi

Residential architecture

The origin of residential architecture in Susiana goes back to prehistory, as attested in the excavated areas at Chogha Mish (Delougaz and Kantor 1996: 30–35; Alizadeh 2008). Generally houses were made from mud-brick and consisted of several rooms. In some cases, baked-brick was used for drainage canals or for thresholds, although rooms usually had beaten earth floors. Compared to the scarce prehistoric evidence, the historic era offers a large number of residential mud-brick structures from the *sukkalmah* period (c.1900–1500 BC), recovered in a vast area in the trench A of *Ville Royale* at Susa by Roman Ghirshman. Although the stratigraphy of *Ville Royale* does not allow for the determination of an exact dating (Carter 1979: 113), it gives a rough indication of the chronological development of residential architecture in this period. Earliest dwelling examples in the level A XV generally consisted of a courtyard surrounded by rooms (Gasche 1986: Figure 3). In order to obtain more privacy, a vestibule was usually provided which separated the inside area of the house from the outside. This room was in fact an intermediate zone in which the doors were not arranged on the same axis to obstruct the direct view from outer to inner part. Indeed, the privacy of the intimate inner part of the house played an important role in Elam almost over all periods.

For the so-called “maison du culte” from the oldest level (A XV), Ghirshman (1967: 7–13) determined two building stages. The arrangement of the rooms was similar in both stages, but the spatial organization of the structure was altered by the modification of the connections between the rooms ([Figure 25.1](#)). In both stages, rooms 4 and 8 seem to have played an important role, due to their considerably large size. Furthermore, they were furnished with a niche and chimney (Gasche 1986: 89). During the first building stage, both rooms were not easy to access. In order to reach them, one had to pass through several rooms ([Figure 25.1a](#)). This condition was changed in the second building stage by modifying the connections in such a way that the large room 4 could have been reached directly from the court 3 ([Figure 25.1b](#)). It therefore obtained in this stage an “open access” character and must have been used as an

audience hall. The room 8 can be considered as the most private part of the house. It possessed on both sides small chambers and was primarily accessible through one of them (room 7). In the second stage, a doorway was built within the large northwestern side of room 8, so that it became reachable directly from room 6. In this manner both main rooms of the house (rooms 4 and 8) came to be more accessible.



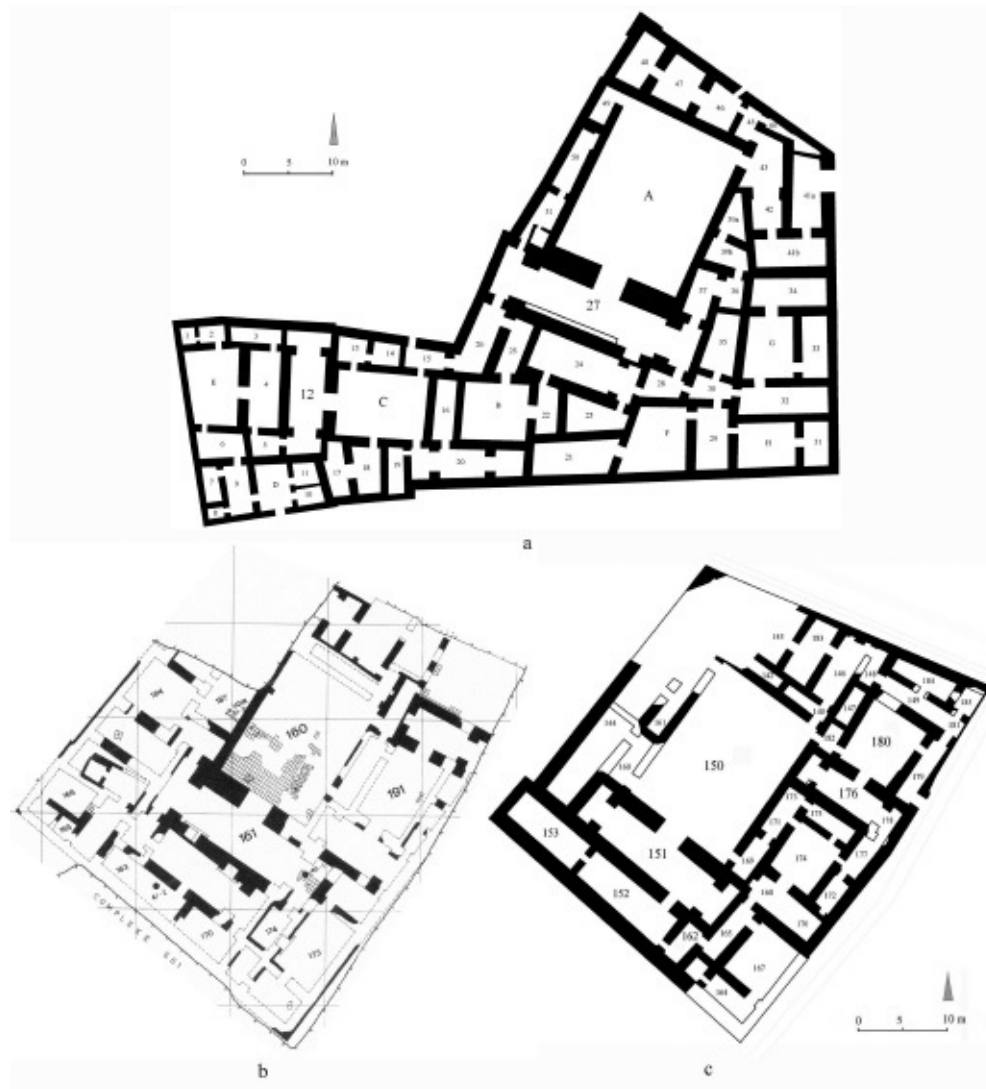
[Figure 25.1 Schematic overview of two building stages of the “maison du culte” in Ville Royale A XV.](#)

The concept of an accessible main hall with two lateral chambers further developed over the course of time. In the posterior level A XIV, the “maison du culte” together with neighbouring structures were replaced by a new construction known as the House of Rabibi ([Figure 25.2a](#); Ghirshman 1965: 97; 1967: 5–7). It included several courtyards and at least two entrances. The largest ingress lay on the east flank and led to the main courtyard A through three rooms. The court was in fact a central distribution area from which it was possible to reach other functional sections. On the southwestern side of the courtyard lay a wide hall (no. 27) with small lateral rooms. Its doorway was centered in the extremely thick frontal wall. Because of the large size of the hall and its easy accessibility from the courtyard, it could be considered as the reception space of the house. A similar pattern can also be observed for the room 12, placed close to the court C, as well as for other houses of the level XIV (Gasche 1973: Plan 4, locus 71). The lateral chambers of the large hall were connected to this room through wide doorways. Ghirshman considered these doorways to be projections from the walls and the lateral chambers as extensions of the large hall, named by him “salles à quatre saillants” (Ghirshman 1965).

Whether it is a hall with wall projections or it is a hall with lateral chambers, its position, dimensions, and easy accessibility emphasize its important role in the public life of the homeowner who most probably had a particularly high economic and social position. His social status required a change in the structure in order to create a suitable reception space for audience and business transactions. The lateral chambers were used for connection to the

other parts of the house.

The same scheme was realized in another large complex of the same level which was named by the excavators as the “East Complex” ([Figure 25.2b](#)). Its “salles a quatre saillants” or large wide hall 161 was on one hand directly accessible from the courtyard 160, and on the other hand, it was connected to other sections through the small lateral chambers. A similar arrangement can also be observed for a smaller variation of “salles à quatre saillants” on the southwestern side of the court 191.



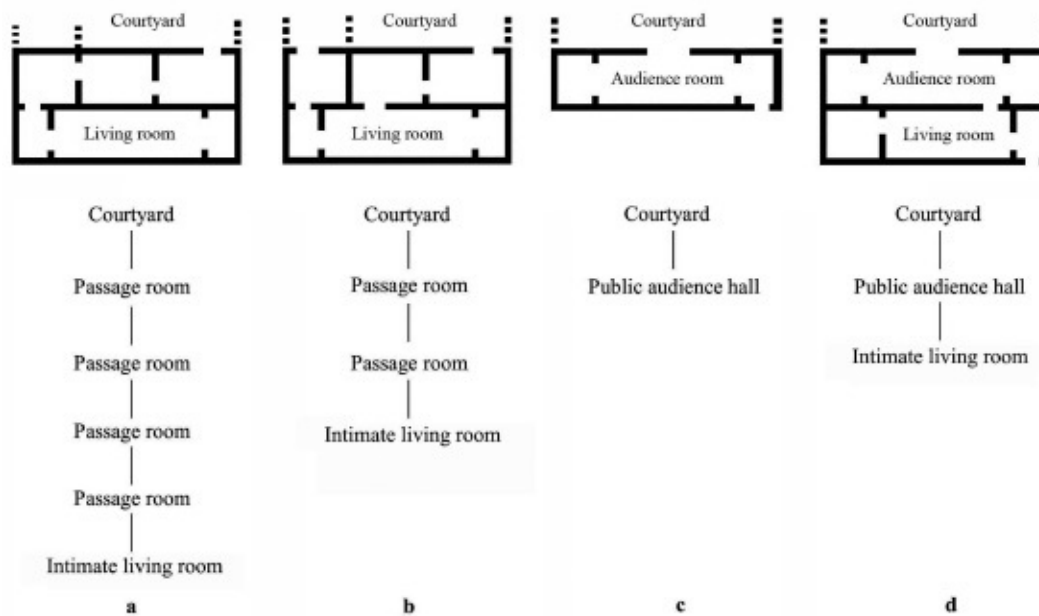
[Figure 25.2](#) Schematic plan of large houses in *Ville Royale A XIV* and *A XIII*. a: House of Rabibi in *Ville Royale A XIV* (after Ghirshman 1965: Figure 3); b: “East Complex” of *A XIV* (after Gasche 1973: Pl. 4); c: “East Complex” of *A XIII* (after Steve, Gasche and De Meyer 1980: Figure 4. Modified after Mofidi-Nasrabadi 2013: 233, n. 724 and Figure 125).

During the following period of level XIII, a modification occurred in the spatial arrangement of the house. In this period, two variations of the “salles à quatre saillants” can be observed ([Figure 25.2c](#), hall 151 and 176). One (hall 176) is similar to those of the preceding period. The other (hall 151) was positioned together with a series of rooms (152, 153, and 162)

in the building's back part and represents a new form of "salles à quatre saillants" providing a secluded, intimate sector of the house. The addition of the back room series can be considered as a new form that carries over into the next level A XII, where it is found in the "East Complex" (Steve, Gasche and De Meyer 1980: Figure 6).

Apparently, therefore, the spatial organization of large residential buildings continued to develop from the time of level A XV to that of level A XII. In the earliest example from level A XV, a hall with lateral chamber can be observed, which was not accessible from the courtyard but through a series of rooms forming the most intimate area of the house ([Figure 25.3a](#)). In the later building stage of the same level, this hall obtained a door in the middle of its long wall and became more easily reachable and less closed ([Figure 25.3b](#)). This aspect is more pronounced in the following period of level XIV. The large wide hall became accessible directly from the courtyard and in this form was open for the public ([Figure 25.3c](#)). Thus, the wide hall developed into an audience area and assumed a new function but on the other hand lost its intimacy, which had existed in the earlier period of the level XV. It is probably for this reason that in levels XIII-XII a series of parallel rooms were added to the rear sector of the house ([Figure 25.3d](#)). In this manner a private intimate section was created at the back of the large hall (Mofidi-Nasrabadi 2013: 231–235).

This transformation in the spatial order of residential architecture must have been the result of improved social contact in the *sukkalmah* era. At first the conception of the main hall as an intimate private living area was of primary importance, while later an openly accessible character played the most important role. This new function could have been effected within a process of increasing social contact accompanied by the rising concentration of capital and economic power in the hands of some individuals. The development reached its climax in the period of the level A XIV as several houses were removed for the construction of the so-called House of Rabibi, who probably played an important economical role in the city (Ghirshman 1967: 5–7). At the same time appeared another large complex in the eastern part of the excavated area ("East Complex"). This period can be therefore assumed to be a phase of increasing socioeconomic differences, during which small homes were forfeited in favor of large ones. The expansion of economic power seems to have decreased in the following phases of the level XIII and XII. Again, small houses appeared more often, but the concept of the reception hall with lateral chamber survived.

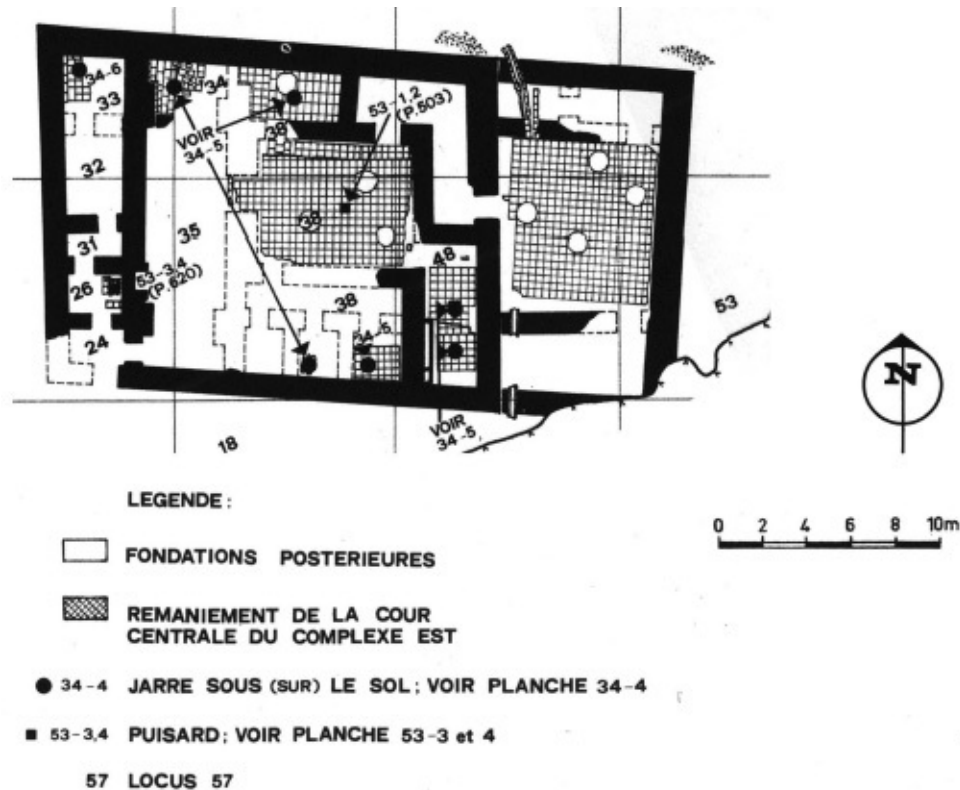


[Figure 25.3 Schematic variations of the main large hall in different levels in *Ville Royale* at Susa. a: First stage of the “maison du culte” in VR A XV; b: Second stage of the “maison du culte” in VR A XV; c: House of Rabibi in VR A XIV; d: “East Complex” in VR A XIII-XII.](#)

The House of Rabibi was replaced by a much smaller building with two courtyards in the level A XII ([Figure 25.4](#)). It seems that the eastern court was added to the structure at a later time. Leo Trümpelmann (1981) suggests that the house was used in its last phase as a brothel because of several large vats presumed to have contained beer, often containing pottery goblets, installed under the baked-brick plaster of six rooms. The adaptation of the building structure to this new function, however, does not alter the fact that it had originally possessed a typical house structure with a vestibule on the northeastern corner, a central courtyard which led to a main reception hall (no. 35) with lateral chambers and an intimate private section in the back part.

For the subsequent Middle Elamite period, we know nothing about the inhabited structures at Susa. Only a few residential buildings are attested at Chogha Zanbil, where Ghirshman discovered two large mud-brick constructions in the eastern part of the city that he referred to as Palaces 2 and 3 (Ghirshman 1968: 47–92). Compared to the monumental complexes at Haft Tappeh or the palace at Dur-Kurigalzu in Babylonia (Heinrich 1984: 89–91), they were built on a much smaller scale and were less suited to receiving an audience. Their identification as palaces is vague, especially considering that there is no evidence for different functional sectors of a palace, such as the throne hall, or administrative and economic sections. It seems that these constructions were planned as temporary accommodation for the royal family and not as their permanent residential palace. The spatial order of both buildings seems at first glance to be similar, but in fact important differences can be observed. The only feature they have in common is that both consisted of two or three similar rectangular sections with a

central courtyard around which rooms were arranged.



[Figure 25.4 Building in the level A XII in Ville Royale at Susa \(after Steve, Gasche and De Meyer 1980: Figure 6\).](#)

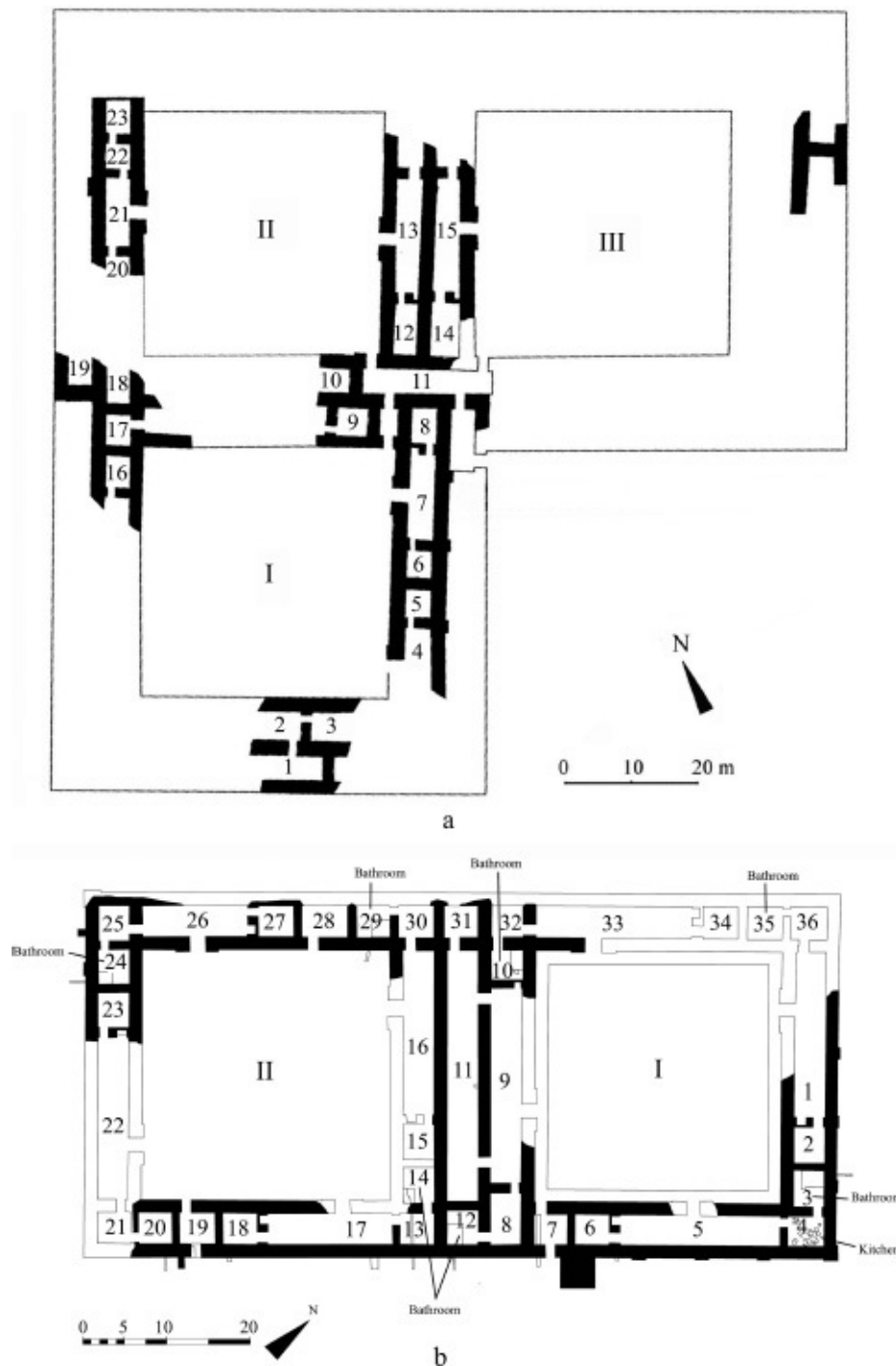
The structure of the so-called Palace 2 is no longer preserved in its entirety. Three square courtyards could be identified, arranged close to each other in an L-shape. The preserved remains of some rooms permit a general reconstruction ([Figure 25.5a](#); Mofidi-Nasrabadi 2013: 218–221). These rooms were situated in two rows on all sides of each courtyard. The main entrance lay in the east corner of the section I which led to a passage (no. 11), from which it was possible to reach every courtyard. The surrounding rooms of the courtyards were divided into different closed units. The unit comprising rooms 6–8 was well preserved on the southeastern side of section I. Accessible from the courtyard, it can be considered an independent dwelling composed of a large hall and two small lateral chambers. Apart from this dwelling with three rooms, there were also variations with four (no. 20–23) or even more rooms.

Although the three courtyard sections were connected, it seems that the surrounding dwellings were not linked to each other. This would mean that the sections I-III were in contact, but several independent domiciles were provided. This planning aspect reflects the functional feature of the construction and gives an insight into the social relationship of those who used it. The layout seems to have been intended for an extended family consisting of three main groups, each with several family nucleuses.

The so-called Palace 3 consisted of two similar square sections with a central courtyard

([Figure 25.5b](#)), which in contrast to those of Palace 2 were not connected to each other, instead being accessible separately from the outside. Their doorways (nos. 7 and 19) were not oriented out towards the city area, but lay on the southeastern side facing the city wall (see [Figure 12.4](#) this volume). Every section was provided with identical dwellings consisting of four rooms. Analogous to Palace 2, they had a wide hall directly accessible from the courtyard and two small lateral chambers. One of the chambers could be identified as a kitchen due to the installation of a hearth. In contrast to Palace 2, every dwelling was furnished with a bathroom containing a basin, positioned behind the kitchen.

Apart of the four-room dwellings there was a larger variation with five rooms arranged in two rows in section I ([Figure 25.5b](#)). From the courtyard it was possible to enter the wide hall (no. 9) which was connected with the kitchen (no. 8) and the bathroom (no. 12) on its sides, and with another wide hall (no. 11) through two doorways at the back. This hall (no. 11) was linked to a small chamber (no. 31). The doorways between the halls 9 and 11 were not situated on the same axis as the entrance from the courtyard, so it was not possible to have any visual contact from outside into the hall 11, giving more privacy in this backward part of the dwelling.



[Figure 25.5 Palaces at Chogha Zanbil; a: The reconstruction of the Palace 2 and preserved dwelling on the southeast of the courtyard I \(after Mofidi-Nasrabadi 2013: Figs. 114–115\); b: The ground plan of the Palace 3 at Chogha Zanbil \(after Mofidi-Nasrabadi 2012a: Figure 15\).](#)

To summarize, Palace 3 consisted of eight independent domiciles, seven of which have an identical ground plan. The main wide hall can be considered as a living and audience area, which on one side was linked to a kitchen as well as a bath and on the other side was connected to a small chamber, probably a bedroom. A single domicile with five rooms also had a similar structure, differing only in that it incorporated two wide halls instead of one. The

first, with its entrance from the courtyard, must have been an audience hall. The second, situated behind, was a private living room associated with the small bedchamber.

These features suggest that the seven identical, but unconnected, dwellings were planned for individuals who were of equal status but not socially associated to each other. Most likely the dwellings were the domicile of different spouses of the king for the period in which the royal court resided in the city. The larger residence in the middle of the construction could have belonged to the main wife. The arrangement of the building entrances prevented viewing from the outside.

The differences between structures of the Palaces 2 and 3 reflect their different functional characters (Mofidi-Nasrabadi 2013: 223–230). However, common to every dwelling of both constructions was a main wide hall, accessible from the courtyard via a central doorway, used as a living and audience room. The above-discussed scheme reveals a continuity of architectural planning with the *sukkalmah* period at Susa. Also the larger domicile variation in the Palace 3 is comparable with the late *sukkalmah* period example in which the large audience hall was associated with other rear rooms ([Figure 25.3d](#)). Thus the domestic space organization in the Middle Elamite period seems to maintain the tradition of the *sukkalmah* era.

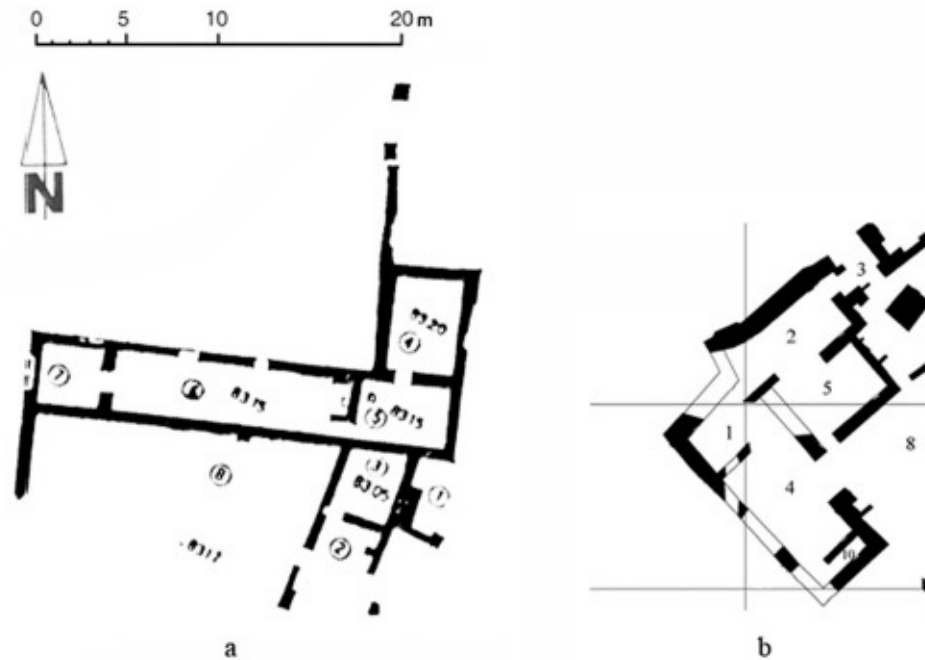
This tradition can be observed likewise in the simple residential structures made by inhabitants, in which the large living room was connected to the courtyard and possessed two lateral chambers. In the north part of the city Ghirshman (1968: 93–95) discovered remains of mud-brick houses which, based on their ceramics, belong to the period of the city's foundation (Mofidi-Nasrabadi 2013: 47). Their wide living room and two adjacent chambers are well preserved (e.g. [Figure 25.6a](#)). Even in the considerably younger domiciles from the beginning of the 1st millennium BC built in the holy district of the middle wall ([Figure 25.6b](#)), the same scheme of wide living room (no. 4) with small lateral rooms (nos. 1 and 10) is present in a simplified form (Mofidi-Nasrabadi 2007: 50–52).

Indeed, some aspects of residential architecture remained almost unchanged for a long period of time. Structural house components like the vestibule as intermediate area, the courtyard as a distribution space, and the large wide hall as a living and audience area can be observed in the excavated domiciles of Elam over the whole 2nd millennium until the beginning of the 1st millennium BC.

Public architecture

From the early era of Elamite history little is known about public constructions. The eldest well-known examples with administrative character belong to the Middle Elamite period. The earliest of these is a mud-brick construction excavated at Haft Tappeh dated to the ME I period (Mofidi-Nasrabadi 2010: 19–22). Judging by the burnt roof beams and layers of ash

found on the pavement of the rooms, it was destroyed by fire. Its complete structure remains unidentified ([Figure 25.7](#)). The recovered area included a large square courtyard (no. 3), on the northwestern side of which is a rectangular room used as a workplace of scribes (no. 1). It was paved with mud-brick and provided with a small canal to channel water used for producing clay tablets (Mofidi-Nasrabadi 2012b). The adjacent room 2 was not well preserved due to the intrusion of several burials after the devastation of the building.



[Figure 25.6 Houses at Chogha Zanbil from a: the ME II period \(after Ghirshman 1968: Figure 36\); and b: the beginning of the 1st millennium \(after Mofidi-Nasrabadi 2007: Figure 12\).](#)

In the southern section of the construction, three long rooms were situated parallel to each other (nos. 6, 9, 12). They formed a section that was difficult to access, so that one had to pass from the courtyard first through the room 4 in order to reach a row of small chambers. From there it was possible to pass through the anterooms 5, 8, 11 and enter the long rooms 6, 9, 12, respectively. Small pieces of gold-plate in room 12 indicate these long rooms were most likely used for storage of valuable objects. This section was separated from the northeastern part through two long rooms (14–15) situated in a row like a corridor. Another room (no. 17) on the northeastern side, furnished with red painted wall plaster, was accessible through the anteroom 16 from the courtyard. Room 17 may also have been a storage area with its anteroom 16.

From a functional and structural point of view, the building was organized in two parts; namely, a work space for the scribes including room 1 as well as the courtyard 3 on the northern side, and a storage section consisting of several long rooms that were difficult to access.

A second example of public architecture is exhibited at Tall-e Malyan (ancient Anshan).

According to textual finds, it was in use during the last phase of the Middle Elamite period (Stolper 1984; Carter 1996). The construction is only partly excavated, showing a rectangular courtyard surrounded by several rooms ([Figure 25.8](#)). On two sides were situated wide rooms with lateral chambers, which show similarity to the central wide halls of dwellings in the palaces at Chogha Zanbil. Therefore, Elizabeth Carter suggested a symmetrical reconstruction for the whole structure similar to the ground plan of the Palace 3 at Chogha Zanbil (Carter 1996: Figure 16). It must be noted that there is no indication of domicile usage of the building as was the case in the palaces of Chogha Zanbil. Since the functional aspect was a significant factor for the formation of the structure, the assumed imitation of the plan of Palace 3 can be considered as highly speculative. Many of the cuneiform tablets recovered at Malyan mention different metals, like gold, silver, copper, and tin, generally as raw metal or as artefacts which were received or delivered (Stolper 1984). A large number of tablets were impressed with the same seal, indicating that the transfer of material must have taken place within a centralized administrative organization. Most probably the construction was used for reception, storage, and redistribution of resources as suggested by Carter (1996: 49). It is therefore possible that storerooms with restricted access, similar to those in the administration building at Haft Tappeh, had existed in the uncovered part of the building. Furthermore, since both raw metals as well as finished products are mentioned in the texts, it can be assumed that the building was in relationship with a metal workshop.

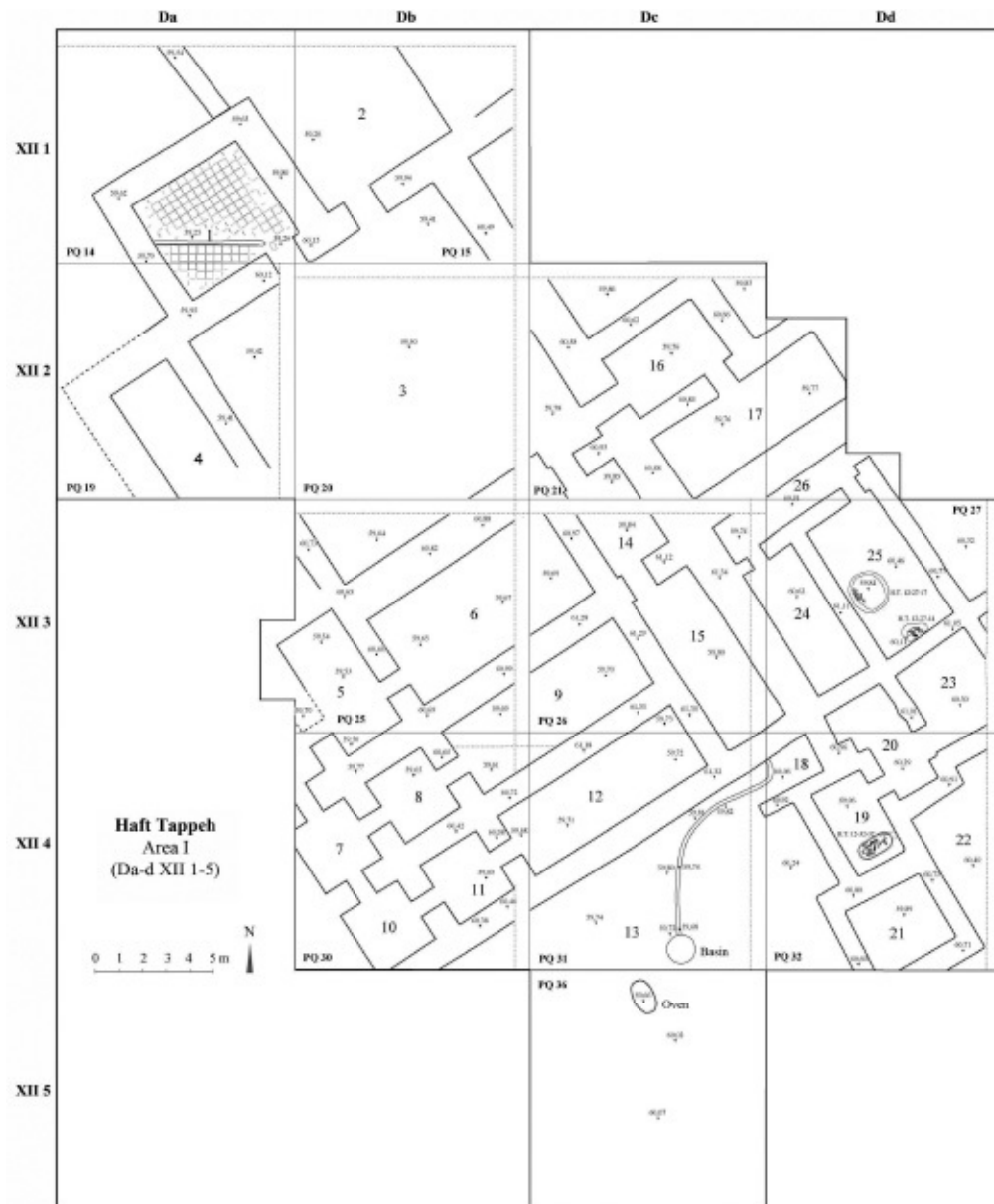
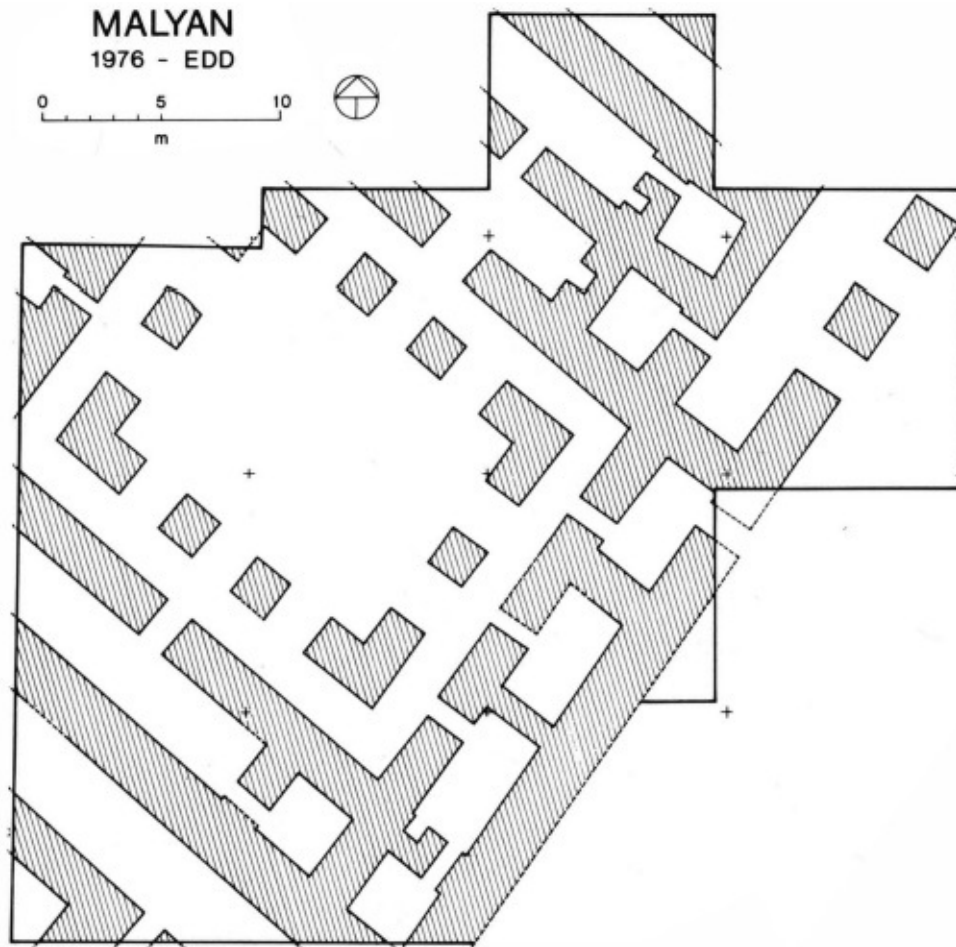


Figure 25.7 Administration building from the second building level (ME I) at Haft Tappeh (after Mofidi-Nasrabadi 2014: Taf. 2).



[Figure 25.8 Public construction from the ME III period at Tall-e Malyan \(after Carter 1996: Figure 16\).](#)

Fortifications

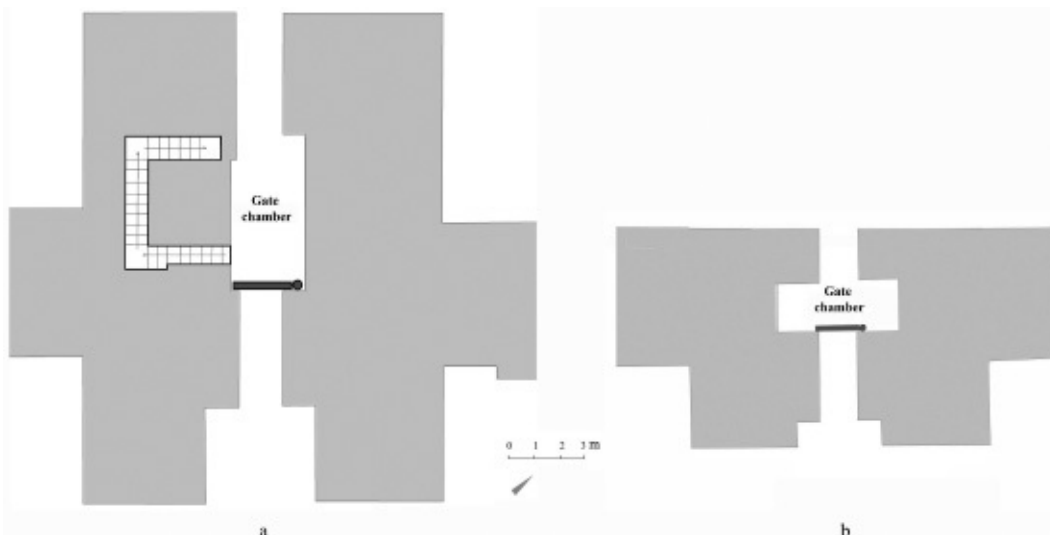
Even though not completely investigated, Tall-e Malyan (ancient Anshan) in the province of Fars provides evidence for a walled city in the early history of Elam (Sumner 1985). The earliest known Elamite fortification in Susiana dating to the *sukkalmah* period was partially excavated at Chogha Mish. The 8–11-m-thick mud-brick wall (Delougaz and Kantor 1996: 18; Alizadeh 2008: 34, Pls. 1B and 2) incorporated a gate building consisting of a square-shaped chamber (Alizadeh 2008: Figs. 8 and 10). On the northwestern side of the gate chamber lay a stairway leading to the top of the wall. Two tower-like projections flanked the entry.

The three wall constructions at Chogha Zanbil deliver the best excavated examples for Elamite fortification architecture. The outer wall was about 4.6 m thick and surrounded the whole city area, while the middle wall with a thickness of 4.8–5 m enclosed the holy district and separated it from the profane area. The inner wall encircling the ziqqurra within the holy district was 2.4 m thick. All three walls were built from mud-brick and furnished with wall projections (see [Figure 12.4](#) this volume). The fortifying aspect is emphasized by rectangular towers on the outside face of the middle and outer walls. All three walls had vertical drainage

canals which were placed about 50 cm behind the wall surface. This led to the assumption that on top of the wall a 40–50-cm-thick balustrade existed with the openings of the canals situated at its foot. According to depicted fortifications and terracotta tower models found at Chogha Zanbil, such a balustrade must have been crenellated (Mielke 2011: Figure 3; Bleibtreu 1994; Porada 1967; Ghirshman 1968: Figs. 7–8).

Every wall was provided with several gates; their characteristic feature was primarily the presence of towers flanking the gateway. At Chogha Zanbil, two types of gate can be distinguished. The first type includes monumental gates, furnished with towers on each side of the inner and outer gateways ([Figure 25.9a](#)). Based on depicted fortifications the towers were higher than the wall. Through a stairway in the gate chamber, it was possible to reach the top of the walls and the towers. The second gate type is a small variation in which generally only two towers on the outside existed ([Figure 25.9b](#)). In its chamber there was no stairway. This type must have been planned for everyday use, while the monumental variation seems to be part of the ritual path, used only in particular festivities (Mofidi-Nasrabadi 2013: 259–304).

Features of the middle wall as well as particular architectonic details of its southeastern gate allow the calculation of its height as 9.87–10.08 m. Since the towers of the gate were surely higher than the wall, their height inclusive of the balustrade could have reached about 14 m (Mofidi-Nasrabadi 2013: 278–283).



[Figure 25.9 Two gate variations at Chogha Zanbil.](#)

An insight into the construction of the gate in the exterior wall is given by the only excavated example, situated in the east corner. It did not lead directly into the city area; one had to first enter through a monumental gate into a large square building with a central courtyard and then exit through a second monumental gate (Ghirshman 1968: 87–89). This building formed an intermediate zone connecting the outside and inside of the city (see [Figure 12.4](#) this volume). The inclination of the stairway in the gate chamber lets us assume that the

top of the wall could have reached over 9 m (Mofidi-Nasrabadi 2013: 296–300). Certainly the towers together with their balustrade were even higher.

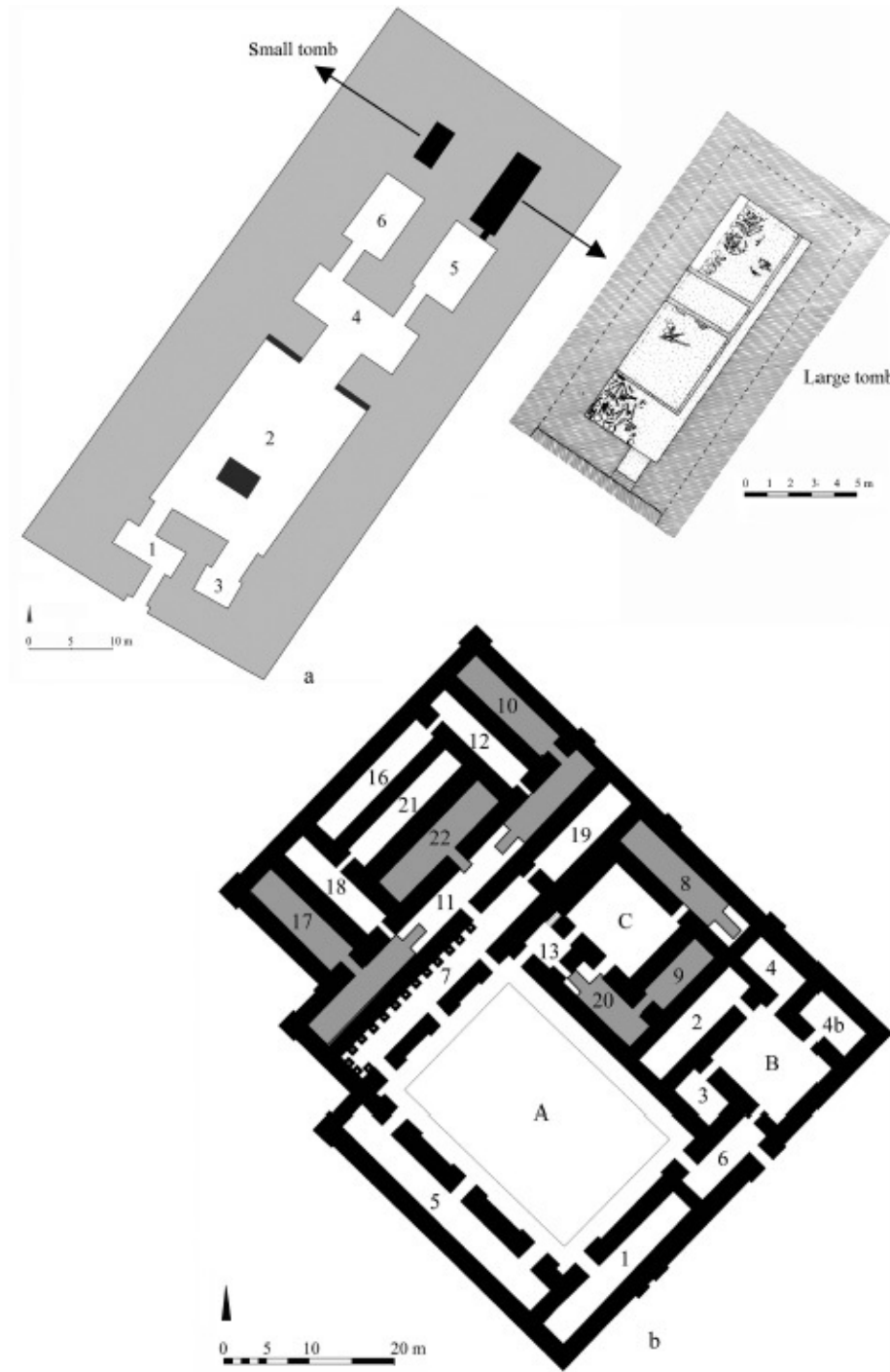
Funerary constructions

Some of the most interesting and mysterious constructions in Elam are the mud-brick buildings with baked-brick underground tombs planned as burial places for deceased individuals of the elite. The buildings were also used for carrying out regular, periodic mortuary rituals. Two such constructions are preserved from the Middle Elamite period: one excavated at Haft Tappeh (Negahban 1991: 12–15) and another at Chogha Zanbil (Ghirshman 1968: 47–74). These cannot be considered as palaces or temples as is suggested by some scholars, because there is no textual or archaeological indication for such assumption (Mofidi-Nasrabadi 2012a; Potts 2016: 184–186). The ground plans of both constructions show a particular spatial organization that obviously should go back to the functional aspects of their structures.

The tomb building at Haft Tappeh is the older of the two, belonging most likely to the building level III from the ME I phase (Mofidi-Nasrabadi 2012c: 86, 98–99). This long rectangular building with strong mud-brick walls was situated in the north part of the city ([Figure 25.10a](#)). A small doorway on its southwestern side led to a vestibule (no. 1). From there it was possible to reach a large courtyard (no. 2) paved with several rows of baked-bricks. Close to the vestibule was a small chamber (no. 3), maybe a storeroom or a stairway leading to the roof. In the middle of the courtyard was placed a large rectangular pedestal of baked-brick, while a podium lay along the northeastern wall flanking a central doorway leading to a wide room (no. 4). From this room one could reach the rear part of the construction, consisting of two long parallel rooms, each furnished with an underground tomb at its rear. Both tombs were made from baked-brick and had a vaulted roof. One was larger and had a broad platform divided into three parts by small walls. Most probably these sectioned spaces were intended for the burials of different members of an extended family as was common in many regions of the ancient Near East. Thus the tomb can be considered as a typical funerary construction. The deposition of at least 21 skeletons indicates that the tomb was used several times. The bones of earlier periods were amassed on the floor close to the entrance in order to make place for new interments on top of the platform. The suggestion of Negahban that the construction must have been the tomb of the king Tepti-ahar is highly speculative, because no direct evidence for a royal mausoleum can be distinguished (Mofidi-Nasrabadi 2003–04: 231–232).

In the smaller second tomb, 23 individuals were buried at the same time. In contrast to the larger tomb, it had no doorway and its floor was plastered with large irregular pieces of gypsum slabs. Remarkably, there was another similar plastered pavement about 20 cm deeper,

separated from the upper one by a layer of sandy soil (Mofidi-Nasrabadi 2012c: 86–88).



[Figure 25.10 Tomb buildings from the Middle Elamite period. a: Haft Tappeh \(modified after Negahban 1991: Pls. 3–4\); b: Chogha Zanbil, underground tombs are marked in grey \(after Mofidi-Nasrabadi 2013: Figure 131\).](#)

Although the construction had a simple ground plan with only a small number of rooms, it included three functional sections ([Figure 25.12](#)). The vestibule together with the large courtyard and the small chamber on its southern corner formed a public section which gave ample space for the gathering of numerous people who could have participated in mortuary practices. This public area was connected to the rear tomb by means of a wide intermediate

room. Lateral to the entrance of this room, the podium on the northeastern wall of the courtyard probably played a practical role in rituals. On the other hand, the wide room had the specific function of hindering direct access to the tombs. The public courtyard as the sphere of the living was separated from the tomb section belonging to afterlife by this intermediate room. In general, the spiritual link between the living world and the underworld can be realized by carrying out rituals which in both spiritual thinking and in conception of spatial order have an intermediate position. In other words, the action space of this world must have been connected to the underworld through an intermediary space where the rituals took place.

A similar functional combination can be observed also for the second series of Middle Elamite funerary buildings excavated at Chogha Zanbil ([Figs. 25.10](#) and [25.12](#)). Compared to the tomb building at Haft Tappeh, the structure at Chogha Zanbil was much more complex. The public section consisted of two parts, one including courtyard A and the other courtyard B. On one side of the vestibule (no. 6) lay the courtyard B, surrounded by three rooms and a kitchen (no. 4) which apparently formed a private dwelling, most probably belonging to the caretaker of the building. On the other side it was possible to enter the large courtyard A flanked by two long halls (no. 1 and 5). This courtyard occupied a large part of the construction and offered sufficient space for the participants in mortuary practices.

The tomb section also included two parts. One could be reached through the room 13 where a pithos containing a goblet was found, maybe used for washing rituals before entering. The second part was situated behind the long hall 7 which possessed 15 small pedestals. This hall had three doorways. In front of the western door lay also a pithos with a goblet, similar to that in the room 13 ([Figure 25.11](#)). Most likely it was necessary to carry out a purification ritual before entering the tomb areas. The arrangement of the three doorways as well as the pithos and the pedestals in hall 7 allows for the reconstruction of a path that must have been passed during a ceremony (Mofidi-Nasrabadi 2013: 236–254).

The constructions at both Haft Tappeh and Chogha Zanbil reflect the notion of a separation between this world and the sphere of the dead, which can be linked only by ritual acts ([Figure 25.12](#)). Therefore, both tomb buildings were provided with a ritual section for mortuary practices which took an intermediate spatial position in the constructions.

Sacred architecture

For sacred architecture from the early era of Elamite history, only some partly recovered structures are known. However, the Middle Elamite period supplies us with more details on this topic. Among the monumental complexes at Haft Tappeh built at the beginning of the Middle Elamite period, some were provided with large terraces of mud-brick (see [Fig 12.3](#) this volume). Fragments of painted gypsum plaster with geometrical designs were found in the rooms close to the so-called terrace I (Negahban 1991: 16; Álvarez-Mon 2005). New fragments

came to light during the last excavation season in 2012. Even if the building possessed no inscribed bricks designating it as a sanctuary, it is highly probable that the terrace was the platform for a temple as was common in this period (e.g. at Dur-kurigalzu, Heinrich 1982: 224–225, Figs. 302–303). In the textual sources of Haft Tappeh, some temples are mentioned, one of them named É.KUR (mountain-like house), which could have been an indication of a monumental building situated on a terrace (Mofidi-Nasrabadi 2003–04: 236–237).

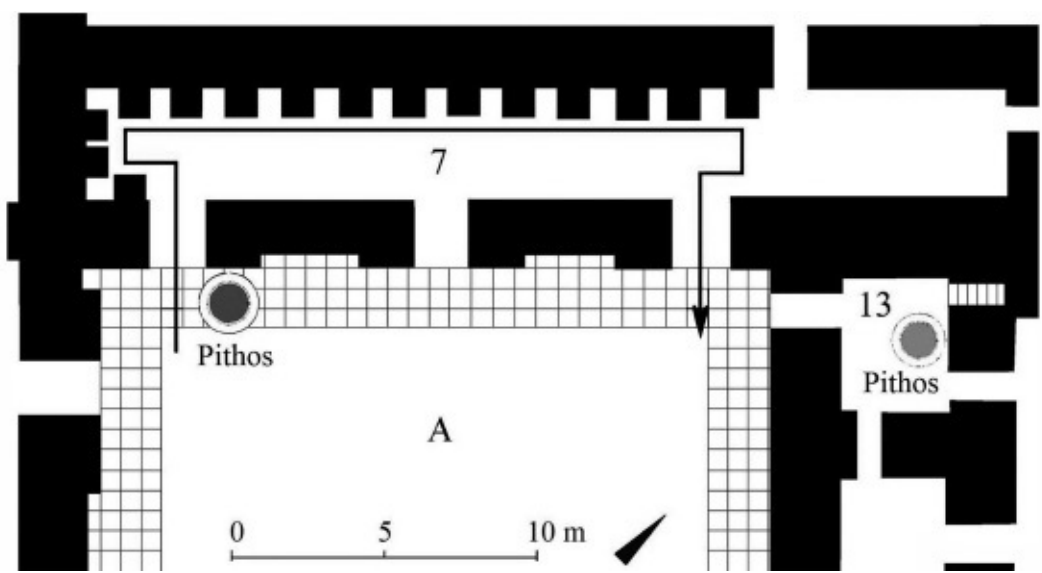
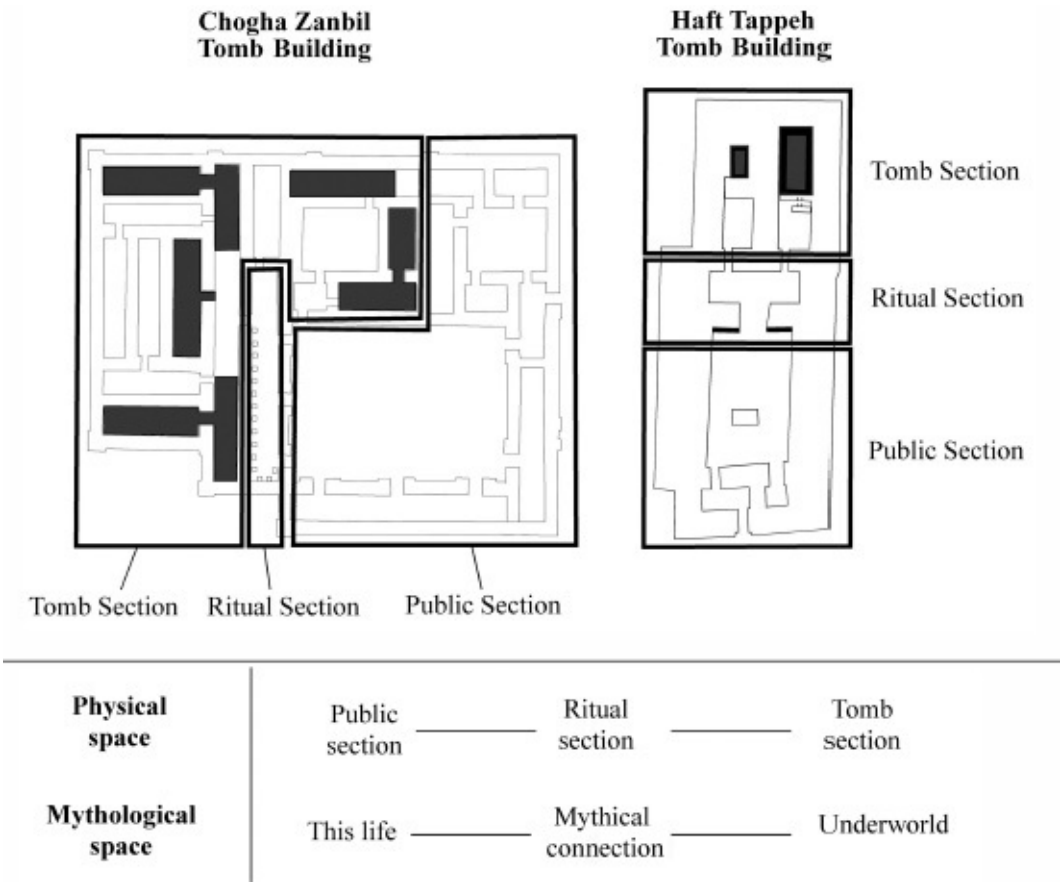


Figure 25.11 Reconstruction of the path taken during the mortuary ceremony (after Mofidi-Nasrabadi 2013: Figure 136).



[Figure 25.12 Spatial order of the Middle Elamite tomb buildings and the mythological relationship of their different sections](#)
(after Mofidi-Nasrabadi 2012a: Figs. 17–18).

In contrast to Haft Tappeh, the temples at Chogha Zanbil (ancient Al-Untash-Napirisha), all built by Untash-Napirisha, were normally furnished with inscribed bricks describing the royal dedication (Ghirshman 1966; 1968; Steve 1967). The new foundation of Choga Zanbil was supplied with a large enclosed holy complex in the center of the city (Potts 2010: 60–64; Mofidi-Nasrabadi 2013: 69–71). It was distinctly separated from the residential part of the city by a large wall. This differs from the Mesopotamian new foundations like Kar-Tukulti-Ninurta and Dur-Sharrukin in which the temples and palaces were situated together in the same sector (Novák 1997). The whole city was divided into concentric areas defined by three walls. The outer area, enclosed by an approximately 4 km long external wall, was planned for habitation, while the area between the middle and inner walls was intended for the deities. The area inside the 2.4 m thick inner wall was the most sacred part of the city belonging to the most important sacral construction, namely, the ziqqurrat, dedicated to the main gods of the empire, Inshushinak and Napirisha. This spatial separation reflected an understanding of mythological space in a hierarchical form, with the most important divinities placed on its top.

In order to implement the city ground plan in the field, the architects used geometric and mathematic formulas, taking the ziqqurrat and its location as the point of reference. It was positioned on a plateau situated about 40 m above the river plain to enable viewing of the ziqqurrat from afar. After marking out the ground plan of the ziqqurrat in the field, a distance double the ziqqurrat length was measured from the middle point of its southeastern side in the direction of the sunrise on New Year's Day. This assigned a point, where consequently a tower was built named *Nur kibrat* ("light of the world"; Steve 1967: no. 21). It determined also the position of the middle wall which was constructed parallel to the ziqqurrat ([Figure 25.13a](#)). In this manner a point was selected to mark the southeastern position of the surrounding wall as well as the position of the sunrise on New Year's morning, which played a major role in the yearly sunrise ritual *sit shamshi* (Mofidi-Nasrabadi 2013: 263–267, 287–291).

The dimensions of the middle wall sides seem to have been measured according to a unit which equaled the distance between the tower *Nur kibrat* and the gates on both of its sides ([Figure 25.13b](#)). Although a rectangular shape was planned for this holy area, deep gullies on the northern and southern parts meant that an exact quadrangular form could not be achieved (for details see Mofidi-Nasrabadi 2013: 275–277, 291–296, 313–319).

The ziqqurrat as the most important building must have been constructed at the city's foundation. Ghirshman distinguished two building stages (Ghirshman 1966: 38–45). In the first stage the ziqqurrat consisted of a square building with a large central courtyard including two temples for Inshushinak named by Ghirshman temple A and B on its southeastern tract. On the other sides of the courtyard, storerooms were arranged. In the second building stage, the

central courtyard was filled with mud-bricks in order to build the ziqqurrat terraces ([Figure 25.14](#)). In this manner the roof of the earlier building became the surface of the first terrace and the upper terraces were constructed within the courtyard. Subsequently, the doors of the temple A as well as of the storerooms in the previous courtyard were blocked. The temple A remained out of use, while the storerooms continued to be used by opening new entrances in their ceilings, so that it was possible to reach them from the surface of the first terrace via a stairway. Eventually the whole mud-brick structure of the ziqqurrat was provided with a baked-brick mantel and decorative elements like glazed bricks. Furthermore, wall knobs were added to the terrace façades (Basello 2012: 6–11).

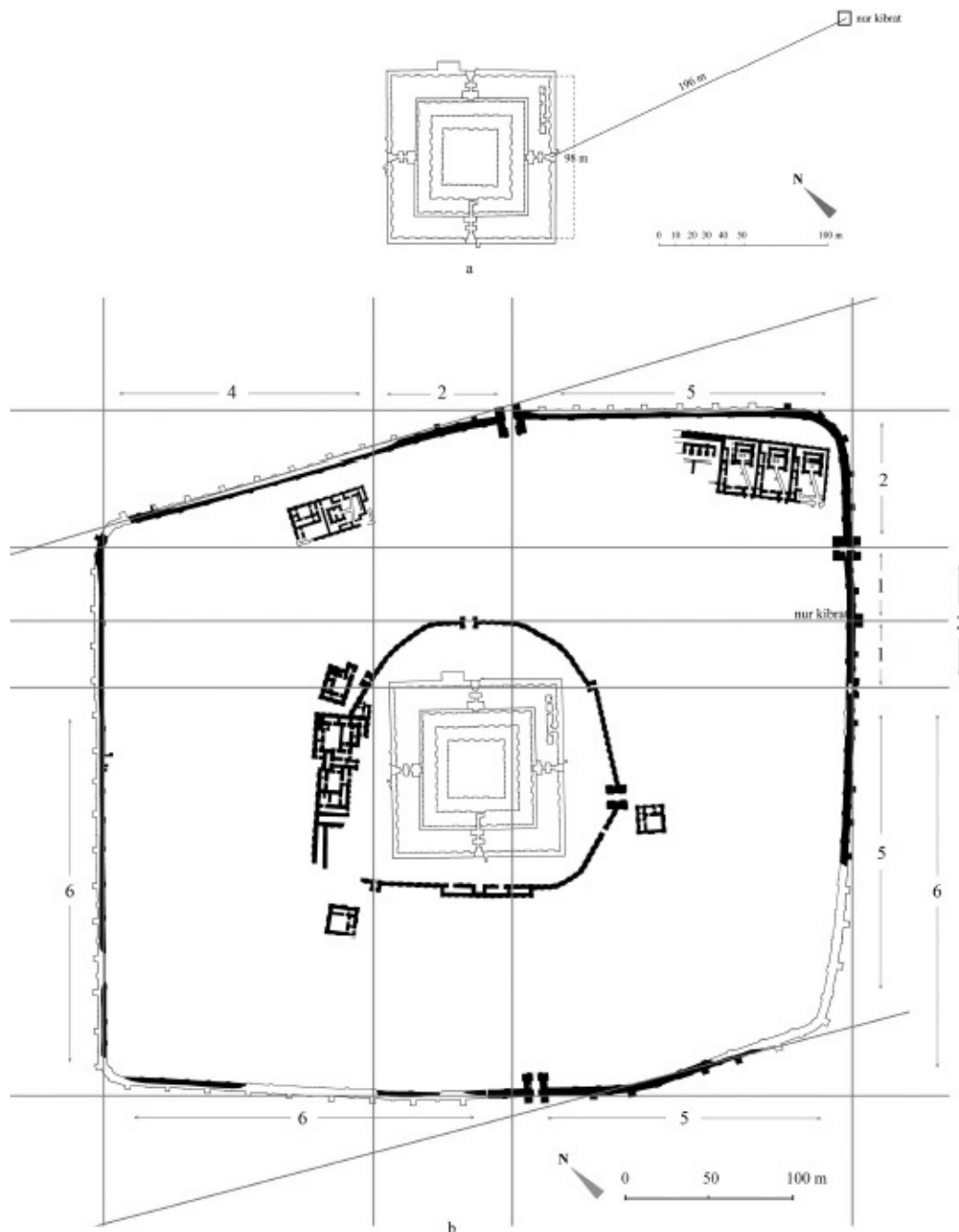
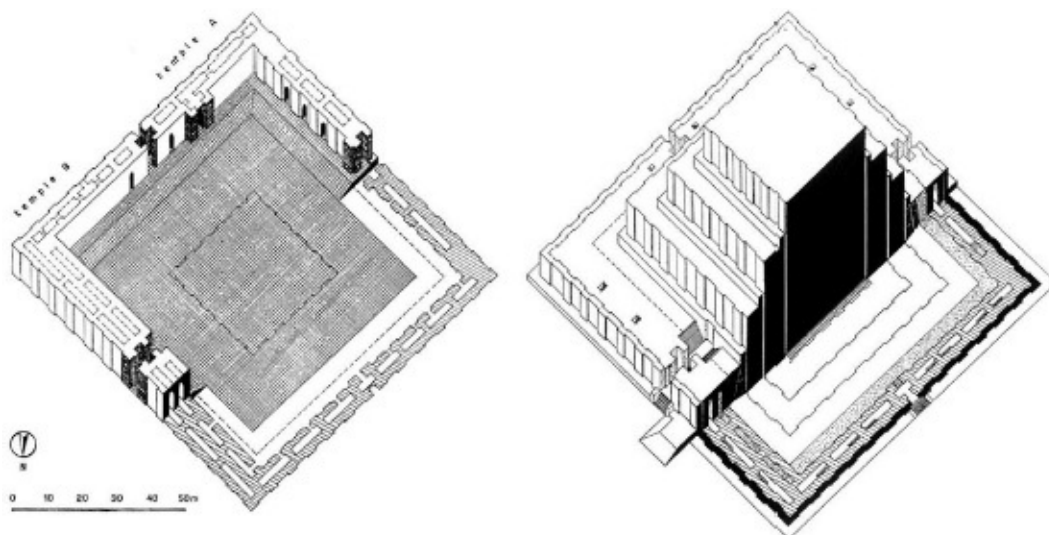


Figure 25.13 Planning aspects of the middle wall area. a: The relationship of the tower *Nur kibrat* to the ziqqurrat in the

For structural reasons, the mud-brick core of every terrace was built separately, resulting in a vertical split between them. Ghirshman was able to identify these splits and discern that the ziqqurrat originally possessed four terraces with a high temple on the top (Ghirshman 1966: 36–38, 58–61). It was therefore possible to distinguish the dimensions of the different terraces.

At first sight, it seems that the dimensions of the ziqqurrat terraces were chosen arbitrarily, but recent research shows that they were selected based on a sexagesimal rule system. The measurement unit for the constructions was the square mud-brick which together with the mortar was about 43 cm long. The mud-brick cores of the first and the second terraces were 216 and 144 bricks long, respectively. Interestingly both numbers can be divided by 6. Taking other terraces into consideration, the brick numbers of all parts divided by 6 resulted in the following scheme (for more details see Mofidi-Nasrabadi 2013: 98–108; 2015: 37–42):

Terrace 1	216 bricks	(36 × 6 or 6 × 6 × 6)
Terrace 2	144 bricks	(24 × 6 or 4 × 6 × 6)
Terrace 3	108 bricks	(18 × 6 or 3 × 6 × 6)
Terrace 4	72 bricks	(12 × 6 or 2 × 6 × 6)
High temple	36 bricks	(6 × 6 or 1 × 6 × 6)



[Figure 25.14 Two building stages of the ziqqurrat at Chogha Zanbil \(after Ghirshman 1966: Figs. 27 and 29\).](#)

In summary, three functional sections can be distinguished for the whole structure. The first terrace accommodated the storerooms and was reachable from all four sides of the ziqqurrat. In contrast, the high temple on top was the holy section which could be accessed only from the southwestern side via a stairway. The third section included the temple B of Inshushinak in the southeastern wing of the ziqqurrat and was easily accessible directly from the outside. Since the main temple of Inshushinak was elevated atop the ziqqurrat, temple B was probably

used for festivities. A podium in front of its door offered the possibility of placing the divine statue in a manner allowing a large number of people to observe the ritual action from outside.

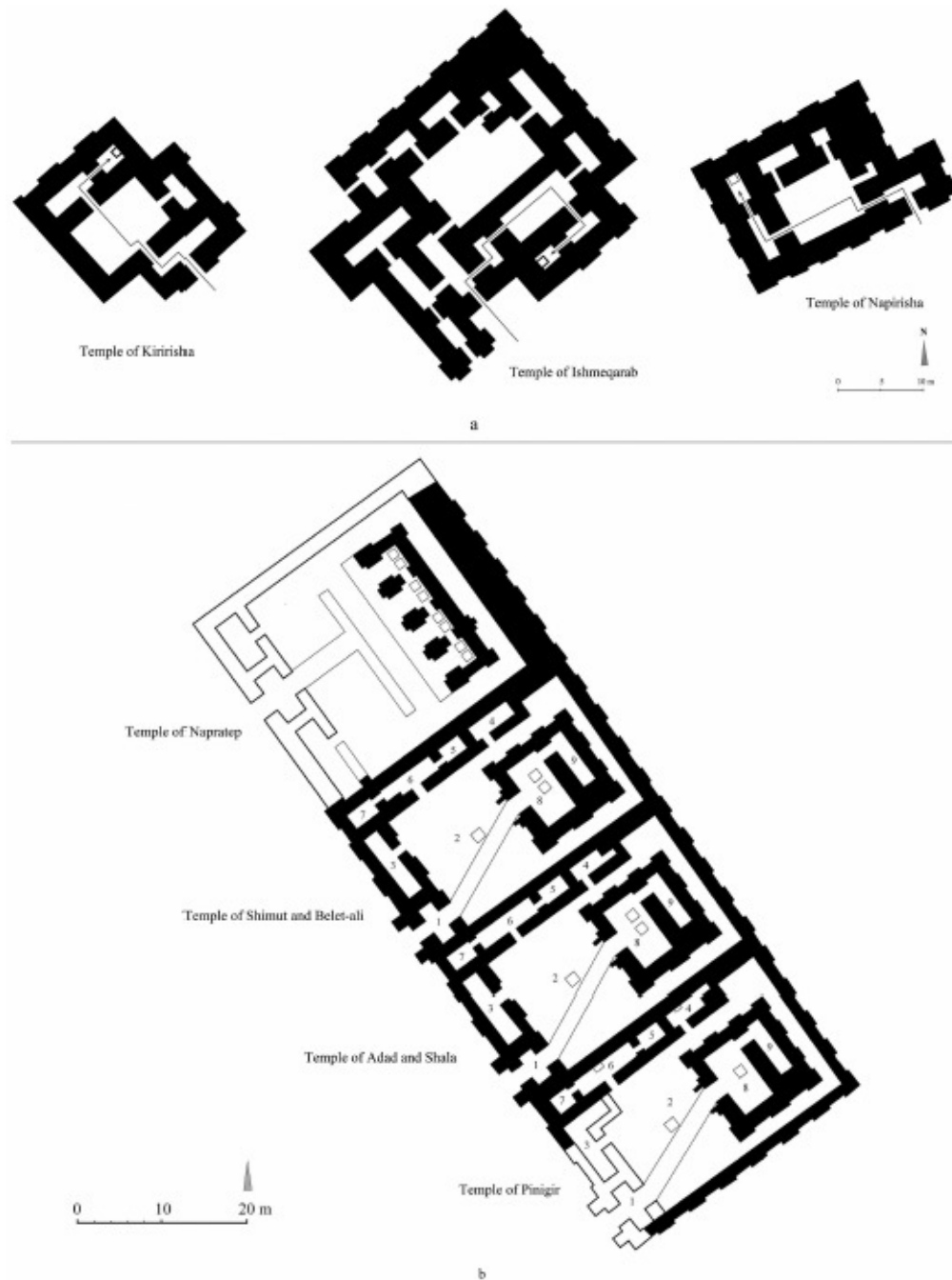
The connection and mode of accessibility to the sacred space played an important role at Chogha Zanbil. Several temples were excavated in the holy area (see [Figure 12.4](#) this volume). Two sanctuaries, one dedicated to Ishmeqarab and the other to Kiririsha, were situated close to the ziqqurrat on its northwestern side and entered from the area inside the inner wall (Ghirshman 1966: 85–104). Another temple was built for Napirisha nearby, but outside of the inner wall. At a distance of about 90 m towards the north, just inside the middle wall, was placed a sanctuary dedicated to Hishmitik and Ruhuratir consisting of two separate sections. In the eastern corner lay a complex of four more temples ([Figure 25.15b](#)), three of which had similar ground plans. The first was dedicated to Pinigir, the second to Adad and his spouse Shala, and the third to Shimut und his spouse Belet-ali (Ghirshman 1968: 9–21). Next to the latter was the fourth temple for a group of gods named Napratep. It contained four chapels, each furnished with two podiums for divine statues, indicating that a group of four divine pairs was worshipped here. Two square buildings close to the southeastern and western gates of the inner wall were made from mud-brick but lacked any inscribed bricks to facilitate identification. Because of their spatial order and structure, they could also have been sanctuaries as suggested by Ghirshman (1966: 105–107).

Outside the holy area, a structure at about 500 m distance on the southeastern side of the ziqqurrat was identified as a sanctuary for Nusku (Ghirshman 1968: 84–87). This suggestion is based on some inscribed bricks found in its debris (Steve 1967: nos. 23–24). On the other hand, several inscribed bricks dedicated to Nusku lay in the holy district of the middle wall (Steve 1967: no. 43). Taking into account that existing baked-bricks in the city area were reused in the later periods, it is also possible that the inscribed bricks found near the construction were transported there later. The identification of the structure as a temple for Nusku therefore remains uncertain.

The temples of Inshushinak, Kiririsha, and Ishmeqarab were arranged together with the ziqqurrat in the area of the inner wall (see [Figure 12.4](#) this volume) and all must have been planned and constructed at the very beginning of the building activities in the city. The structure of these temples was completely different to those built shortly afterwards in the eastern corner of the middle wall, meaning that two distinct temple categories can be recognized ([Figure 25.15](#)).

The structures of the two different temple types indicate that a change in accessibility to the cella took place. In the earliest form observed in the temples of Kiririsha, Napirisha, and Ishmeqarab ([Figure 25.15a](#)), the rooms and the doorways were organized so that the cella was an isolated, protected place reachable only by passing through several rooms. Generally, a vestibule led to the courtyard from where it was possible to reach an antecella and then the

cella, the well-protected main domicile of the deity with a podium for the divine statue. The whole construction was intentionally planned to make the cella difficult to access, giving an introverted character to the structure. This characteristic changed over the course of some years during the city foundation, as can be observed in the four-temple complex in the eastern corner of the middle wall area. The ground plan of these sanctuaries represents a totally different concept of spatial order ([Figure 25.15b](#)). The vestibule (no. 1) possessed two large doors which were both placed on the same axis leading to the courtyard (no. 2). This eliminated the function of the vestibule in shielding the interior from the outsider viewer. The cella (no. 8) with the podium for the deities was placed in the middle of the courtyard and furnished with a back storeroom. There was no antecella in order to protect the privacy of the cella. The statue of the divinities could have been viewed through the wide doorway even from the outside.



[Figure 25.15 Different temple types at Chogha Zanbil. a: The temples on the northwestern side of the ziqqurrat; b: The complex in the eastern corner of the middle wall.](#)

The modification of the sacred structure from a sanctuary with particularly protected and isolated cella to the temple type with an easy accessible chapel seems to be associated with the change in usage of the temples. Traditionally, Elamite sanctuaries were protected and not easily accessible. An understanding of isolated sacral space initially lay behind the structure of the sanctuaries as well as the foundation of the holy area, which was provided with a monumental wall separated from the rest of the city. On the other hand, this was contradictory to the fact that the new foundation and its monumental buildings must have been displayed as important deeds of the king Untash-Napirisha. His extraordinary

undertaking must certainly have attracted worshipers, raising public participation in religious ceremonies. Thus came into being a social dynamic that required a new appropriate form of sacral architecture providing greater possibilities for religious communication. This may have been the reason underlying the development from an introverted temple type to an extroverted type within some decades of the city's foundation.

Because of a lack of sanctuary examples from later periods, it cannot be concluded whether the new temple type was transmitted more broadly within Elam or remained an exception realized only at Chogha Zanbil for a short time. Textual sources provide indications that the traditional introverted type with a less accessible cella must have been used even in the Neo-Elamite period. In the inscriptions of the Neo-Assyrian king Assurbanipal, Inshushinak is characterized as the god who lives hidden, so that nobody is able to view his divine presence (Streck 1916: 53).

Bibliography

- Alizadeh, A. 2008. *Chogha Mish II. The Development of a Prehistoric Regional Center in Lowland Susiana, Southwestern Iran. Final Report on the last six Seasons of Excavations, 1972–1978*, Oriental Institute Publications 130. Chicago: The Oriental Institute of the University of Chicago.
- Álvarez-Mon, J. 2005. Aspects of Elamite Wall Painting: New Evidence from Kabnak (Haft Tappeh). *Iranica Antiqua* 40: 149–164.
- Basello, G.P. 2012. Doorknobs, Nails or Pegs? The Function(s) of the Elamite and Achaemenid Inscribed Knobs. In: Basello, G.P. and Rossi, A.V. (eds.) *DARIOSH Studies II. Persepolis and its Settlements: Territorial System and Ideology in the Achaemenid State*, Series Minor 78. Napoli: Università degli Studi di Napoli “L’Orientale”, 1–66.
- Bleibtreu, E. 1994. Festungsanlagen auf neuassyrischen Rollsiegeln und Siegelabrollungen. In: Dietrich, M. and Loretz, O. (eds.) *Beschreiben und Deuten in der Archäologie des Alten Orients. Festschrift für Ruth Mayer-Opificius mit Beiträgen von Freunden und Schülern*, Archäologische Studien zur Kultur und Geschichte des Alten Orients 4. Münster: Ugarit Verlag, 7–14.
- Carter, E. 1979. Elamite Pottery, ca. 2000–1000 B.C. *Journal of Near Eastern Studies* 38: 111–128.
- . 1996. *Excavation at Anshan (Tal-e Malyan): The Middle Elamite Period*, Malyan Excavation Reports 2, University Museum Monograph 82. Philadelphia: University of Pennsylvania.
- Delougaz, P. and Kantor, H.J. 1996. *Chogha Mish, Volume I. The First Five Seasons of Excavations 1961–1971*, Oriental Institute Publications 101. Chicago: The Oriental Institute of the University of Chicago.
- Gasche, H. 1973. *La poterie Élamite du deuxième millénaire a.C.*, Mémoires de la Délégation Archéologique en Iran 47. Leiden – Paris: Brill – Geuthner.
- . 1986. Architecture d’intérieur Susienne: Les cheminées. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta Historiae Elamicae. Mélanges offerts à M. J. Steve*. Paris: Éditions Recherche sur les Civilisations, 83–109.
- Ghirshman, R. 1965. L’architecture élamite et ses traditions. *Iranica Antiqua* 5: 93–102.

- . 1966. *Tchoga Zanbil (Dur-Untash), Volume I. La ziggurat*, Mémoires de la Délégation Archéologique en Iran 39. Paris: Librairie Orientaliste Paul Geuthner.
- . 1967. Suse. Campagne de l'hiver 1965–1966. Rapport préliminaire. *Arts Asiatiques* 15: 3–27.
- . 1968. *Tchoga Zanbil (Dur-Untash), Volume II. Temenos, temples, palais, tombs*, Mémoires de la Délégation Archéologique en Iran 40. Paris: Librairie Orientaliste Paul Geuthner.
- Heinrich, E. 1982. *Die Tempel und Heiligtümer im Alten Mesopotamien. Typologie, Morphologie und Geschichte*. Berlin: Verlag Walter de Gruyter.
- . 1984. *Die Paläste im Alten Mesopotamien*. Berlin: Verlag Walter de Gruyter.
- Mielke, D.P. 2011. Stadtmauer, B. Archäologisch. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 13/1–2, 80–85.
- Mofidi-Nasrabadi, B. 2003–2004. Archäologische Untersuchungen in Haft Tappeh (Iran), *Archäologische Mitteilungen aus Iran und Turan* 35–36: 225–239.
- . 2007. *Archäologische Ausgrabungen und Untersuchungen in Čogā Zanbil*. Münster: Agenda Verlag.
- . 2010. *Vorbericht der archäologischen Ausgrabungen der Kampagnen 2005–2007 in Haft Tappeh (Iran)*. Münster: Agenda Verlag.
- . 2012a. The Spatial Order in the Tomb Buildings of the Middle Elamite Period. In: Pfälzner, P., Niehr, H., Pernicka, E. and Wissing, A. (eds.) *(Re-)Constructing Funerary Rituals in the Ancient Near East. Proceedings of the First International Symposium of the Tübingen Post-Graduate School "Symbols of the Dead" in May 2009*. Wiesbaden: Harrassowitz, 261–270.
- . 2012b. Arbeitszimmer eines Schreibers aus der mittelelamischen Zeit. In: Wilhelm, G. (ed.) *Organisation, Representation, and Symbols of Power in the Ancient Near East*, Proceedings of the 54th Rencontre Assyriologique Internationale at Würzburg 20–25 July 2008. Winona Lake, IN: Eisenbrauns, 747–756.
- . 2012c. Vorbericht der archäologischen Untersuchungen in den Kampagnen 2008, 2009 und 2010 in Haft Tappeh (Iran). *Elamica* 2: 55–159.
- . 2013. *Planungsaspekte und die Struktur der altorientalischen neugegründeten Stadt in Chogha Zanbil*. Aachen: Shaker Verlag.
- . 2014. Vorbericht der archäologischen Ausgrabungen der Kampagnen 2012–2013 in Haft Tappeh (Iran). *Elamica* 4: 67–167.
- . 2015. Reconstruction of the Ziqqurat of Choga Zanbil. *Elamica* 5: 37–52.
- Negahban, E. 1991. *Excavations at Haft Tepe, Iran*, University Museum Monograph 70. Philadelphia: University of Pennsylvania.
- Novák, M. 1997. Die orientalische Residenzstadt. Funktion, Entwicklung und Form. In: Wilhelm, G. (ed.) *Die orientalische Stadt: Kontinuität, Wandel, Bruch*. Saarbrücken: Harrassowitz, 169–197.
- Porada, E. 1967. Battlements in the military architecture and in the symbolism of the Ancient Near East. In: Fraser, D. and Hibbard, H. (eds.) *Essays in the history of architecture presented to Rudolf Wittkower*. London: Phaidon, 1–12.
- Potts, D.T. 1999, 2016. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*. Cambridge: Cambridge University Press.

- . 2010. Elamite Temple Building. In: Boda, M.J. and Novotny, J. (eds.) *From the Foundations to the Crenellations. Essays on Temple Building in the Ancient Near East and Hebrew Bible*, Alter Orient und Altes Testament 366. Münster: Ugarit-Verlag, 49–70 and 479–509.
- Steve, M.-J. 1967. *Tchoga Zanbil (Dur-Untash), Volume III. Textes élamites et accadiens de Tchoga Zanbil*, Mémoires de la Délégation Archéologique en Iran 41. Paris: Librairie Orientaliste Paul Geuthner.
- Steve, M.-J., Gasche, H. and De Meyer, L. 1980. La Susiane au deuxième millénaire: à propos d'une interprétation des fouilles de Suse. *Iranica Antiqua* 15: 49–154.
- Stolper, M.W. 1984. *Texts from Tall-i Malyan, I. Elamite Administrative Texts (1972–1974)*, Occasional Publications of the Babylonian Fund 6. Philadelphia: University Museum.
- Streck, M. 1916. *Assurbanipal und die letzten assyrischen Könige bis zum Untergange Niniveh's*. Leipzig: J.C. Hinrichs'sche Buchhandlung.
- Sumner, W.M. 1985. The Proto-Elamite city wall at Tal-i Malyan. *Iran* 23: 153–161.
- Trümpelmann, L. 1981. Eine Kneipe in Susa. *Iranica Antiqua* 16: 35–44.

CHAPTER TWENTY-SIX

Elamite ceramics



Bernadette K. McCall

Introduction

Elamite ceramics is the encompassing term applied to the mainly plain but occasionally painted wares that would come to dominate the archaeological assemblages of south-western Iran during the 2nd millennium and into the first half of the 1st millennium BC (Carter 1992). Defined in geographical terms as a territorial range incorporating highland and lowland zones that take in a large part of what is now western and south-western Iran (see Potts 2016: 14–ff.), the discussion of ceramics will focus on the better known material culture of the Susiana and surrounding plains leading into the Zagros Mountains. Carter (1984: 103) described a ‘loose unity of material culture’ focused around the political capitals of Elam, from Susa, the lowland centre, through to the highland capital of Anshan, Tal-e Malyan, in Fars province. Elamite ceramics are best documented at Susa and at sites and regions extending into the Zagros Mountains from Khuzestan to Fars (Carter 1971; Gasche 1973; Miroschedji 1981a, 1981b; Carter 1984: 144–ff.; 163–ff.; 1992: 294 for overviews), but renewed investigations in south-western Iran in more recent years warrant the present updated review (see Potts 2016 for overview).

Considerable research has been undertaken on Elamite ceramics, including comprehensive regional studies, but for reasons often as simple as limited access to sites and assemblages, there is still much to be explored. This chapter cannot claim to be exhaustive in terms of archaeological evidence, nor in thematic coverage, but the aims are to synthesise current scholarship, highlight potential avenues to pursue and encourage innovative approaches to future research. The goal is to introduce the main source materials for studying Elamite period ceramics, as a starting point for future research in the field, and to acquaint readers with the different resources available, and their critical application, as new data has been made available. It is impossible to present a comprehensive assessment of all scholarship for this volume. Instead, the chapter will provide an overview of the most relevant sources that characterise Elamite ceramics, document the distribution and composition of major

assemblages, highlight the main phase markers and chronological developments in the wares. As a consequence, the chapter will also trace the ways in which research in this field has developed and help identify areas which would benefit from further research. In most instances, it will be necessary to provide much-abbreviated summaries of available data underpinning the study of Elamite ceramics, without the level of detail or illustrations present in the original studies; these works should also be consulted to fully understand the major developments in this field, occasional gaps in our knowledge, or omissions of detail from original excavators that by necessity can escape overviews such as this one.

Given the cautionary remarks regarding the use of Elam as a toponym to describe the Zagros foothills and highlands east of Mesopotamia, and the extension of this to the presumably heterogeneous past populations that occupied the region and their associated cultural materials (see Potts 2016: 9–12; Álvarez-Mon 2012), it is appropriate to begin the discussion of Elamite ceramics with a similar caveat about the application of such a broad, externally assigned term to the ceramics from this region. By at least the mid-third millennium BC, the name Elam is attested from Mesopotamian sources to describe the lands to the east into the Zagros highlands, yet tracing the historical development of Elam through the third millennium, we are confronted with complex political and economic relationships within and beyond the Elamite realm (see Álvarez-Mon 2012; Potts 2016: 145–148; Stolper 1984). This complexity, coupled with internal social groupings and alliances, and the potential for transference of material traits across an extensive political network, makes it difficult, but not impossible, to define what is meant by the ceramics of Elam as a cohesive cultural assemblage, particularly during its early phases (Potts 2016: 145).

While the historical evidence supports the existence of Elam and Elamites as a political and cultural entity earlier in the 3rd millennium BC, the archaeological character and location for the earliest Elamite phases remain elusive. At Susa, where the most complete sequences covering the period have been uncovered, Mesopotamian traits dominate the material record, and in the period immediately before the 2nd millennium BC, material assemblages are further complicated by evidence of widespread external contacts (Potts 2016: 79–ff.; 111; Carter 1984: 133–135). The necessary focus on the Susa sequences, combined with the highly regional nature of Zagros Mountains material assemblages makes it difficult to understand the origins and early development of Elamite ceramics. It is not until the early 2nd millennium BC that materials identifiable as Elamite appear in archaeological assemblages, when Elam was under the control of the Shimashki dynasty (Carter 1984: 144).

Background to the archaeological resources

Although not the earliest research undertaken on Elamite ceramics, two quite different yet complementary studies appeared in the early 1970s that have become the main foundation

works in this field (Carter 1971; Gasche 1973). Drawing on datasets that varied in their scope and methodological basis, they provided the main starting point for future research. The first, a comprehensive study of Elamite ceramics carried out by Elizabeth Carter (1971) was based on regional excavations and survey data from Khuzestan, Ram Hormuz and Deh Luran. The study established chronological divisions within Elamite assemblages based on ceramic markers, which were used to reconstruct patterns of Elamite settlement over the 2nd millennium BC. This was followed by Herman Gasche's (1973) publication of Elamite ceramics from Susa, synthesising two decades of excavations at the Ville Royale mound. Gasche's work recreated an archaeological sequence spanning the second millennium BC from two discrete areas, Chantiers A and B. The finds were linked stratigraphically to the limited published data then available from other Elamite sites, Choga Zanbil, Haft Tepe, Tepe Farukhabad and Tal-i Ghazir. The study produced a comprehensive and stratified typology of vessel forms from two urban exposures at Susa, but one which Gasche noted was not without problems given the nature of the data and the potential for intrusive materials in different excavation strata (Gasche 1973: 7–8).

Gasche's classification of Elamite ceramics has provided an enduring typological framework which was considered at the time to represent an unbroken stratigraphic sequence for the period. As further regional excavation sequences became available, Carter (1979) re-evaluated the stratigraphy and dating assigned to Susa A and B levels, suggesting there was greater complexity in the mostly arbitrary archaeological 'levels' assigned, and noted interruptions in the sequence (Carter 1979: [Table 26.1](#)). However, many of the points raised were addressed soon after on the basis of dated textual and other historical evidence in support of the original phasing (Steve et al. 1980: 78). At this stage, the available Haft Tepe material was still to be published, study of the Middle Elamite/Qaleh phase at Anshan in Fars was incomplete (see Carter 1996) and the Neo-Elamite phase was largely unknown. Subsequent excavations at Susa, Ville Royale II, provided a more complete picture of the ceramics from the later Middle and Neo-Elamite phases with a sequence continuing into levels of the Achaemenid period (Miroschedji 1981a).

A comprehensive synthesis of the material cultures found across the Elamite world followed, incorporating what was then known of the contemporary highland and lowland regions and including the Neo-Elamite finds from Susa (Carter 1984). More specifically focusing on ceramics of the second millennium, a further overview summarised Elamite phase markers, correlating the Sukkalmah to Middle Elamite phases with contemporary Kaftari to Qaleh material assemblages from the highlands (Carter 1992). This later review incorporated Carter's own more detailed analysis of the later Middle Elamite finds from highland Tal-e Malyan (Anshan), unpublished at the time (appearing in Carter 1996), based on data obtained before the 1980s, but not extending into the Neo-Elamite phases. In light of a renewal of archaeological research and excavations in Iran, a re-examination of research into Elamite

ceramics is timely, as new and legacy data from fieldwork undertaken in decades past are published, along with current research questions and methodologies that are driving these studies (Wright and Carter 2003; Potts et al. 2009, Mofidi-Nasrabadi 2007, 2014a, 2014b; Carter and Wright 2010; Alizadeh et al. 2014, for example).

Archaeological phasing and main assemblages

Elamite ceramics and material culture are now generally divided into four main phases: Shimashki, Sukkalmah, Middle Elamite and Neo-Elamite (see Potts 2016). Some variation and further subdivision exists within this framework, particularly from older publications (see Carter 1979, 1984, Gasche 1973, for example), but these standardised terms are retained here to minimise further confusion and avoid the complexity of regional sequences or site-specific terminology. While broadly based on historical events, these archaeological phases were initially defined to help understand changes in a long and continuous Elamite ceramic sequence (Carter 1971, 1979). Devised on the basis of ceramic typology, the phases were not meant to directly correlate with historical or political changes, and initially included a ‘Transitional’ phase in the middle of the sequence (Carter 1971, 1984: 144–145). This Transitional phase has since been incorporated into the early Middle Elamite phase, but the similarities in ceramics between this and the preceding Sukkalmah phase highlight the problem of synchronising changes in political structures with the material record (Carter 1992; Carter and Wright 2010: 15). The dates provided here are included as a general guide to the archaeological phases only, and have been drawn mainly from the recent synthesis of the archaeology and history of Elam by Potts (2016) unless otherwise noted. The phase summaries do not aim to provide a comprehensive list of excavated sites with archaeology dating to that phase but list the main assemblages considered to be either representative or having some utility for understanding the ceramics of the phase.

Old Elamite Shimashki and Sukkalmah phases

Shimashki phase ceramics, although displaying many regional Mesopotamian characteristics, preface any discussion of Elamite assemblages and are often found at sites that continued to be occupied into the Sukkalmah period (Carter and Wright 2010: 14). The Shimashki phase has been dated elsewhere to the late 3rd millennium BC, contemporary with the Late Akkadian and Ur III periods (Carter 1992; Carter and Wright 2010), but for the purposes of this review the Shimashki phase is dated from c. 2000–1900 BC and the Sukkalmah phase from c. 1900–1500 BC; together they cover the first half of the second millennium BC, or the Old Elamite period (Potts 2016; Steve et al. 1980: 78). These two phases are best represented by excavated assemblages from Susa and smaller exposures from sites in Khuzestan, Ram Hormuz and Deh

Luran (see Carter 1984; 1992; Wright and Carter 2003; Alizadeh et al. 2014; Carter and Wright 2010: 14; and Potts 2016: 144, 169–172 for references to other known regional Elamite and related material in the highlands).

Shimashki phase (c. 2000–1900 BC)

At Susa, ceramics of the Shimashki phase are represented in the Ville Royale Chantier B (VR B) and in the Ville Royale I (VR I) sounding (Gasche 1973; Carter 1980). The first sample consists of a large selection of complete and near-complete vessels recovered from a series of small urban courtyard houses; the VR I assemblage comprises a smaller but complete sample of finds from exposures containing mixed domestic and burial contexts (Carter and Wright 2010: 14). Outside of Susa, finds from a sounding at Tepe Farukhabad (Layers B15–19) in the Deh Luran plain have also been found to contain Shimashki phase ceramics with links to Susa VR B and to late 3rd millennium Mesopotamian types (Carter and Wright 2010: 14; Carter 1981, 1971). Kaftari highland ceramic traditions focused on the region around Anshan have been found to be contemporary with the Shimashki period, but no clear parallels with Susa materials are known until the following phase (see Petrie et al. 2005). Until the geographic extent of Elamite political influence at this time can be clarified, uncertainty remains about which archaeological assemblages from Khuzestan, Fars or elsewhere can be attributed to the Shimashkian Elamites (Potts 2016: 123). As noted above, the archaeology at Susa does not signal any clearly defined break in ceramic styles at the end of the 3rd millennium BC. The start date of c. 2000 BC assigned to the Shimashki phase is based on dated tablets found in floor deposits in B VII. These tablets date from 2035–2027 BC and place the BVII deposits in the period immediately before the Shimashki era (see Potts 2016: 142–143), following the chronology proposed by Steve et al. (1980: 78).

Sukkalmaḥ phase (1900–1500 BC)

This much longer phase is represented by deposits from the Ville Royale Chantier A (VR A), levels AXV to AXII and VR B, level V at Susa, which contain the main Sukkalmaḥ phase assemblages (Gasche 1973; Steve et al. 1980). The VR A sample consists of whole and near-complete vessels in the large open area excavation at the northern end of the mound. Many vessels were found *in situ*, set into or underneath floors in a succession of building levels comprising private housing, public buildings and industrial complexes (Potts 2016: 161–162). Elsewhere in Susiana, at the small site of Tepe Sharafabad, the earliest of four Elamite occupation layers was uncovered in a discrete area of the site. It contained remains of architecture and a small but varied range of ceramics best paralleled in the Sukkalmaḥ phase at Susa (Schacht 1975: 323). The Sukkalmaḥ phase is also represented at Tal-i Ghazir (Tall-e

Geser) in Ram Hormuz, in several areas from excavations conducted in the late 1940s, but only recently has a comprehensive publication appeared based on the original excavation records (Alizadeh et al. 2014; Caldwell 1968; see also Carter 1994, Carter and Wright 2003). As at Tepe Sharafabad, the Sukkalmah phase represents a reoccupation of the site after a long gap commencing around the middle of the 3rd millennium with material from Mound A (Level 2) providing the bulk of the published finds found in association with architectural and non-structural contexts (Alizadeh et al. 2014: 12, 15–16). At Tepe Farukhabad, the Elamite sequence continues into the Sukkalmah phase in Levels B 14–11b, with parallels from Susa in VR BV and A XV–XIV (Carter 1981: 209).

Recently, new excavations at Haft Tepe have uncovered a previously undocumented early occupation layer (Level I) from a small area of the site dated to the 17th–16th centuries BC (Mofidi-Nasrabadi 2014a). Ceramics were paralleled with several of Gasche's vessel types from Susa in levels B V, and A XV – XIII as well as some finds from B VII – VI (Mofidi-Nasrabadi 2014a: Pl. 9–16). Some dating anomalies from C14 samples in Level I may indicate a Shimashki phase date but are considered inconclusive, as the site stratigraphy and other finds support inclusion in the Sukkalmah phase, from c. 17th century BC (Mofidi-Nasrabadi 2015). It is during this phase that painted and plain Kaftari wares from the Zagros highlands show their earliest parallels with Elamite ceramics (Petrie et al. 2005: 53). Kaftari ceramics are best known from Tal-e Malyan (Anshan) and the surrounding plains (Nickerson 1983; Sumner 1989) and from soundings in Mamasani at Tol-e Nurabad and Tol-e Spid (Potts et al. 2009).

Middle Elamite period (c. 1500–1000 BC)

Phasing during the second half of the second millennium BC has seen the most revisions and there is considerable variation in proposed subdivisions and terminology, and between archaeological and historical phases in the literature. Three historical phases are proposed following changes in dynastic control: Middle Elamite I, 1500–1400 BC; Middle Elamite II, 1400–1200 BC; and Middle Elamite III, 1200–1100 BC (see Potts 2016: 176–177). Archaeologically, the period is divided into two phases, but the dating is by necessity less precise and open to interpretation as new material becomes available: Middle Elamite I (replacing the Transitional phase), c. 1500–1400/1300 BC; and Middle Elamite II – III, c. 1400/1300–1000 BC (Carter 1992; see Potts 2016: 197). The end date adopted here is derived from the main archaeological sequence at Susa from the Ville Royal II (VR II) exposures, in keeping with the proposed division between Middle Elamite levels and a probable gap between this and the Neo-Elamite excavation levels (Miroschedji 1981a), but differs in the use of MEII – III for the phase name to limit confusion between historical and archaeological data.

At Susa, the Middle Elamite I (or Early Middle Elamite) phase is represented in VR A XI and in the Ville Royale-Apadana (VR-Apadana) trench, Level 9. A gap in the VR A sequence

separates the Middle Elamite II – III levels of A X and A IX from the previous phase Level 8 in the VR-Apadana trench (Miroschedji 1981a: Table 26.2). The sequence uncovered in the later Ville Royale II excavations spans the Middle Elamite II – III, Levels 13 to 10 ending c. 1000 BC (Miroschedji 1981a). It was noted, however, that the diagnostic samples from Levels 12 and 11 were small and the description of ceramic types for the later Middle Elamite phase relies on the very similar materials in Level 10 (Miroschedji 1981a: 14–15). The original excavations carried out at Haft Tepe also uncovered extensive remains of building and burial complexes from the Middle Elamite I phase (Negahban 1991), and Levels II – IV from new excavations provide further evidence of this phase (Mofidi-Nasrabadi 2014a: 105). The ceramics and dated inscriptions place these levels in the late 15th–14th centuries BC, and radiocarbon determinations concur: Level II was correlated with the Terrace Complex 1 from Negahban's excavation and Level III with the royal tomb building (Mofidi-Nasrabadi 2015; see Potts 2016: 186 for updated site terminology). At Choga Zambil, ceramics from the varied religious and tomb building complexes uncovered in initial excavations were dated to the 11th century BC, contemporary with Susa A X and A IX (Pons 1994; Ghirshman 1966, 1968). The site has also undergone renewed excavations, and further final Middle Elamite layers are identified as Level 3 (Mofidi-Nasrabadi 2007).

Late second millennium Middle Elamite II-III ceramics have also been found in Fars at Tal-e Malyan, in the EDD building, Levels IV-III, which closely match Susa types and exhibit affinities with local Qaleh wares (Carter 1996: 17–30), and from the small soundings and surface collections in Mamasani which point to more extensive Elamite settlement in the highlands (Potts et al. 2009; McCall 2013). Surface investigations at Tal-e Malyan indicate that further evidence of this phase exists elsewhere on the site (Carter 1996: 2). Similarly small stratified assemblages dating to the Middle Elamite phase were found at Tal-i Ghazir (Caldwell 1968; Carter 1994; Alizadeh et al. 2014), and the latest Elamite occupation level from Tepe Sharafabad belongs to Middle Elamite I (Schacht 1975).

Neo-Elamite period (c. 1000–539 BC)

Similar issues to those noted above relate to this period when attempting to correlate three historical phases (see Potts 2016: 249) with archaeological data from Susa which was divided into two phases, Neo-Elamite I from c. 1000 BC to the later 8th century BC, and Neo-Elamite II continuing until the Achaemenid period (Miroschedji 1981a: Table 26.2, 38–39). Starting at c. 1000 BC and possibly after a gap in the sequence at Susa following the final Middle Elamite Level 10 (Miroschedji 1981a: 35), stratified Neo-Elamite ceramics are best known in the VR II sequence, Neo-Elamite I from Levels 9–8 and Neo-Elamite II from 7B – A, and the VR-Apadana sequence from Levels 7C and 7B – A, respectively (Miroschedji 1981b). Added to this are the later phases revealed at Choga Zambil, Level 2, 10th–9th centuries BC and Level 1,

8th–7th centuries BC, paralleled with the Susa finds (Mofidi-Nasrabadi 2007: 90). These two sequences from Susa and Choga Zanbil constitute the main Neo-Elamite assemblages for characterising the later phases of the period. Further ceramic evidence of the Neo-Elamite period is known from Ram Hormuz at Tal-i Ghazir (see Carter 1994; Alizadeh et al. 2014) and now also from western Fars in excavated soundings, particularly at Tol-e Nurabad, Trench B (see Potts et al. 2009). However, evidence from surveys and test excavations in Ram Hormuz, Mamasani and Deh Luran indicates that the full distribution of Neo-Elamite ceramics outside Susa and into the highlands is yet to be fully revealed (Carter 1994; McCall 2013; Carter and Wright 2010).

Vessel types

Gasche's classification of ceramics from the long Ville Royale A and B sequences at Susa provides the typological framework for the Elamite period (Gasche 1973). The resulting study created a typology primarily based on overall ceramic forms, and although new discoveries for the Middle and Neo-Elamite phases have expanded our knowledge, the major vessel types identified at Susa form the basic type-series for archaeologists studying this period. Gasche's aim was to trace the evolution of vessels and related ceramic forms through successive occupation layers, and the results offer a diverse sequence for the Elamite period from varied contexts within the Royal city, and combined with Carter's extensive work from surrounding regions has enabled ongoing changes in ceramic styles to be characterised between phases (Carter 1971, 1992). The typology was devised primarily on the basis of overall morphology and common variations within these groups, including manufacturing traits that were also consistently applied to certain forms. The assemblage was found to contain a large and complex variety of ceramic forms classified into 37 groups, and Gasche also added seven other categories that he termed *Hors groupe*, ceramics that could not be classified into the general typology. The complete range of forms is extensive and includes small and large vessels or utilitarian forms used in domestic, monumental, funerary and architectural contexts, including bowls, goblets, bottles, small and large jars, vats and less common forms such as flasks, high-footed cups, vessel stands and items used for drainage. The vessels are predominantly plain, but distinctive moulding and applied bands, incision and less common painted decoration are known. Motifs include linear bands in association with cross-hatched fill, triangles with cross-hatching, or wavy lines, and surface treatments for the most part consist of slips or smoothing only (Gasche 1973; Carter 1992).

The most common and distinctive vessel forms throughout the period are the small jars and goblets classified as Groups 19, 20 and 21, and although goblets of type 19b appear suddenly in the Sukkalmah phase and exhibit clear Mesopotamian attributes, they become typical and widely distributed elements in Elamite assemblages (Gasche 1973: 37; Pons 1994). At Choga

Zanbil, the most frequent forms identified from diagnostic sherds are jars with banded rims (Gr. 29, 30 types), wide-mouth vats (Gr. 34) and button bases from Groups 19c and 20 goblets (Mofidi-Nasrabadi 2007: 87); and at Haft Tepe, button-base goblets or elongated jars of various overall forms were consistently the most frequent vessels identified (Mofidi-Nasrabadi 2014a: 83). Certain vessels have only been found in limited, often burial, contexts (Gr. 26 and Gr. 27 chalices, e.g.), and other vessel types are encountered in burials or domestic contexts alike – elongated jars and goblets, bowls and small vessels – which potentially had different practical and symbolic functions in either context, and some vessels were used for burial containers (see Carter 2011: 49). Architectural functions are often apparent from context, as can be seen with inset open-ended sumps or latrines, pipe sections and guttering, or can be inferred from storage vessels set into and under floor levels of buildings or associated areas at Susa, and Tepe Sharafabad, for example (Gasche 1973: Pl. 51–53, 68; Schacht 1975: 323; see Potts 2016: 161–163 for discussion of site contexts and potential vessel functions). To help understand how vessels were used at Choga Zanbil and Haft Tepe, they were assigned to different functional categories, including storage vessels, kitchen vessels, vessels used daily for eating and drinking, luxury vessels, cult vessels, vessels of an industrial nature and other miniature forms (Mofidi-Nasrabadi 2007: 80–ff.)

Elamite ceramics by phase

From the main stratified assemblages excavated at Susa and throughout Khuzestan, the characteristic vessel types, wares and technological traits that typify certain phases underline the changes and continuity within the longer sequence (Carter 1971, 1984, 1992; Gasche 1973; Miroschedji 1981a, 1981b). These features are summarised in [Table 26.1](#) based on previous scholarship and updated with currently available data. The table presents the main ceramic characteristics for each phase and, where detail permits, has been further subdivided (see the later Middle Elamite phase, for example). It is prudent to bear in mind that material complexity and ongoing uncertainty surrounding dates (particularly in the early levels at Susa) are not so easily translated into archaeological summaries, particularly during the Shimashki phase when the nature of Elamite material culture is still elusive (see Potts 2016: 145). The summaries are intended as a guide to understanding the main trends and developments that mark each phase. However, differentiating precisely between one phase and the next can be difficult in excavated assemblages and more so with survey collections. Dating should rely on broader categories of material or scientific dating methods which suit the scale of the investigation.

Problems, questions and new research

The table summarising ceramic trends from the Elamite period draws together data obtained using different collection strategies and from varying contexts and sites to present broad material trends, particularly important in a fragmented political landscape such as the Zagros Mountains. However, it also highlights limitations and several potential research streams. The problem of understanding the early development of Elamite ceramics with their obscure origins and the continued use of ceramic types with close ties to Mesopotamian characteristics remains (Potts 2016: 143). Many of the historically recorded Elamite regions have not been located, and the origins of the later cohesive material culture may have its roots in as yet unexplored areas (see Potts 2016: 127; Table 5.1). Not knowing their actual locations will make it very difficult to determine which group or groups contributed most to the development of later material assemblages. Shimashki ceramic types also continue to occur with later Sukkalmah ceramics, noted in Deh Luran and in the lower level at Haft Tepe which suggests a gradual shift in forms from one phase to the other (Carter and Wright 2010: 14; Mofidi-Nasrabadi 2014a). Continuity in forms coupled with a marked change in the technological aspects of ceramic production in the Sukkalmah period should be investigated further to see what mechanisms created change, such as local innovation or transfer of skills (Carter and Wright 2010: 14).

Table 26.1 Elamite ceramic characteristics by phase.

Period	Phases	Main sites	Main forms	Main ware types and surface treatments	Main forms and other diagnostic forms	Phase characteristics / comments
NEO-ELAMITE NE I-II (1000-646BC)	NE II	VR II (L. 7B-6)		Common wares (cw): Red-brown group with mixed mineral and minimal vegetal temper; some crushed sherd temper; coarse, poorly smoothed surfaces, irregular string-cut bases. Buff to light brown group, with some vegetal and mixed mineral temper; buff slipped, either well smoothed or rough surfaces. Coarse mineral tempered wares (csw): four groups based on dominant inclusions, either white, grey, red or fine, sandy, with minimal vegetal temper. Surfaces are smoothed or occasionally rough. Glazed wares, fine red-brown or common wares; used on some bowls, bottles, jars; green or greenish white glazes.	<i>Main forms:</i> Bowls, small conical curving wall. Goblets, footed, short slightly everted open types without neck; or cylindrical necked forms (not illustrated, CZ, Mofidi-Nasrabadi 2007: Pl. 45-6). Jars, cylindrical neck, elongated body with round or pointed bases, height varies from 40-80cm; typical form. Jars, short neck, globular body; or wide mouth form with projecting rim with low relief ridge/groove high below. Small bottles, glazed surface. <i>Other forms:</i> Large wide-mouth vats (<i>pithoi</i>), incurving wall with projecting rim and ridge combination; various small jars and bowls. (Miroschedji 1981a:29-33).	-Increasingly coarser wares than preceding phases; fine wares disappear. -Red-brown common wares 75% and buff 15% of assemblage at Susa; coarse wares 10%. All wheel formed; some large vessels partially hand-built. -Goblet types at Choga Zanbil similar to later Gr. 19c types (Mofidi-Nasrabadi 2007:Fig. 45-46). -Ceramics found in Ram Hormuz (Carter 1994); and limited evidence in highlands (Potts et al. 2009; McCall 2013).
		Other key sites: Choga Zanbil (Ph. 1)				

Period	Phases	Main sites	Main forms	Main ware types and surface treatments	Main forms and other diagnostic forms	Phase characteristics / comments
NE I	VR II (L. 9-8)	Other key sites: Choga Zanbil (Ph. 2)		Mainly reddish-brown for all wares, some lighter and buff variants. Common wares (cw): red-brown, with mineral and vegetal inclusions, carelessly smoothed surfaces; a buff ware with abundant vegetal temper; and a less common red-brown ware with larger vegetal and abundant mineral temper, rough surface and thin slip or wash. Coarse wares (csw): coarse vegetal and crushed sherds temper, white mineral grit. Fine wares (fw): fine mineral, or no visible inclusions, slipped, well smoothed (minor component only). Surface treatments consist of beige or self-coloured slips, rare glazed (greenish) vessel.	<i>Main forms:</i> Bowls (cw), conical small and medium all irregularly formed and finished, string-cut bases (Gr. 1 types); Larger deep bowls (cw), sinuous profile with various plain or everted rims (Gr. 3 types); deep conical bowls with pinched spout at rim (new form); basins, plain or with projecting rim and ridge. Large necked jars, banded rims; or cylindrical neck, ovoid body (cw, csw). Large wide-mouth vats (<i>pitthoi</i>) and jars, mostly upright or incurving wall with projecting rim and ridge combination high on wall; most with ring-base, some with opening at base (csw). <i>Other forms:</i> goblets, mainly globular body with ridged shoulder (fw); cylindrical with incised decoration; and less common forms (cw). Jars, small rounded, mainly cylindrical necks (cw, occasional fw). Jars, medium narrow and wide-mouth forms with short neck, banded, bevelled or plain rims, some with side spouts (cw, csw). (Miroshedji 1981a: 19-22).	-Limited continuity in forms, fewer goblets (10%) and new cylindrical incised form. -Elamite goblets virtually disappear at Susa; examples continue at Choga Zanbil (Mofidi-Nasrabadi 2007). -Bowls, large jars and vats main forms. -Common and coarse wares dominant types. -Glaze appears in Level 8. -Ceramics found in Ram Hormuz (Carter 1994); and limited evidence in highlands (Potts et al. 2009; McCall 2013).
			Relative scale 1:2			
ME II-III	VR II (L. 12-10) VR A X-IX VR-AP (L. 8)	Other key sites: Choga Zanbil (Ph. 3) Tal-e Malyan (EDD)		Dominated by light brown, buff ware. Fine ware (fw): very fine mineral, rare or no vegetal inclusions (small bowls). Common ware (cw): red-brown to buff, mainly light brown; abundant fine vegetal temper, white mineral grit, occasional crushed sherds temper. Coarse ware (csw): red-brown to buff, light brown; coarse vegetal and crushed sherds temper, white mineral grit. Slipped (self) and/or smoothed surface treatments.	<i>Main forms:</i> Bowls (fw, cw), small conical with string-cut base (Gr. 1); small (fw) and medium (cw); bowls with sinuous profile (Gr. 3). Goblets, elongated with high cylindrical necks (Gr. 19c); ovoid body with button-base; and globular body with ridged shoulder. Large jars, short neck with banded rim, ovoid or globular body; short neck with triangular shaped rim (Gr. 29a, 30). Small jars, narrow straight neck; and wide-necked forms. Large wide-mouth jars/vats (<i>pitthoi</i>), everted wall with opening in base; upright wall with projecting rim and ridge. <i>Other forms:</i> small bowls, bevelled edge rim; large shallow bowls; large jars without neck; jar stands. (Miroshedji 1981a: 15-17; Carter 1992).	-Simplified range of ceramic forms continues from MEI -Appearance of high-necked "Elamite goblet." -At end of phase (L. 10) goblets no longer made in fine wares. -Ware types at Susa equally dominated by common and coarse fabrics at end of phase with only c.10% fine wares. -Typical ME ceramic forms (including goblets) appear in Zagros highlands at Tal-e Malyan (Carter 1996), and Mamasani (see Potts et al. 2009; Fig. 3.121; McCall 2013).
	VR II (L. 13) VR A XI			Fine ware (fw): brown to buff, as above. Common ware (cw): red-brown to buff, mainly light brown; abundant fine vegetal temper, white mineral grit, occasional crushed sherds temper. Coarse ware (csw): red-brown to buff, light brown; coarse vegetal and crushed sherds temper, white mineral grit.	<i>Main forms:</i> Goblets, small with button base; short with carinated shoulders; and ovoid body with button-base. Bowls, small, round and conical (fw and cw); and large versions (csw). Jars, with and without necks and large open forms (csw). (Miroshedji 1981a: 13).	-Even proportion of ware types in assemblage. -Bowls, large (cw) -Goblets in fine ware only. -No high necked elongated goblets at Susa in this phase. -Ware types/forms found in Fars, Tal-e Malyan (Carter 1996), Mamasani sites (Potts et al. 2009; McCall 2013).
			Relative scale 1:2			

Period	Phases	Main sites	Main forms	Main ware types and surface treatments	Main forms and other diagnostic forms	Phase characteristics / comments
ME I (Early Middle Elamite)	VR-AP (L. 9).	VR A XI-IX		Plain buff wares, mostly greenish-buff, with occasional reddish or grey ware; grit-tempered; or grit and vegetal.	<i>Main forms:</i> Goblets, cylindrical neck, ovoid body (Gr. 19c), angular shoulder, ovoid body (Gr. 20a); rounded shoulder, squat globular body (Gr. 20b); small jar/goblet with carinated shoulder (Gr. 21b); and elongated ovoid type goblet/flask; button and pedestal bases, some with central plug to form foot (see HT Types V, VI, XIII, XIV, XVI).	-Continuity in forms and ware types from Sukkalmah phase; difficult to differentiate but trend towards fewer forms.
	Other key sites: Haft Tepe (HT) L. II-IV			Mostly wheel made. Slip colours buff, pink to green tinged.	Jars, small with round or pointed base (HT types I-IV).	-Base types change on cylindrical goblet, from Gr. 19b flat types to Gr. 19c pedestal bases.
				Minor painted component, crudely rendered geometric motifs (HT, Negahban 1991). Buff wares, fine vegetal temper (HT, Mofidi-Nasrabadi 2014a). Grey wares, painted decoration.	Jars, large oval body, rounded base (see Gr. 30). <i>Other forms:</i> Painted flasks (Gr. 13), bowls (see Gr. 1, 2).	-Large open ended vats continue (Gr. 35). -Highland (Kaftari/Qaleh) Elamite links in grey wares, painted forms.
OLD ELAMITE (c. 2000–1500 BC)	Sukkalmah B V	VR A XV-XII		Vegetal tempered buff wares more common; larger forms also contain sand, crushed sherd temper.	<i>Main forms:</i> Goblets, elongated ovoid or cylindrical body, flat and stump base (Gr. 19b).	-Major change in clay preparation (shift from mineral to vegetal temper)
				Surfaces slipped and unslipped. Relief bands and ridges common on body of large jars, vats; projecting ridges on shoulder of closed forms.	Jars, squat, angular shoulder (Gr. 21a-b). Large open-mouthed jars/vats (Gr. 33-34). Large closed jars/vats (Gr. 36-37). <i>Other forms:</i> painted 'Elamite' flasks (Gr. 13).	-Closed forms dominate. -Painted flasks characteristic Elamite form -Gr. 6 bowls disappear
				Incised and impressed decoration also found on larger forms. Painted geometric decoration present but not common (flasks, small jars, beakers) Use of bitumen as a surface treatment (interior/exterior).	Bowls, angled/curved carinated wall (Gr. 3). Large vats, open-ended (Gr. 35).	-Continued influences from Mesopotamia including appearance of string-cut bases.
Shimashki	VR I B VII-VI			Mainly plain, grit tempered buff wares dominate. Occasional grey, brown-black reduction-fired wares with no vegetal temper (see Gr. 25). Occasional decoration: incised, impressed applied bands or ridges on larger forms; rare linear, wavy painted bands on miscellaneous small forms (see Gr. 16, Hg. III). Some use of bitumen on surfaces.	<i>Main forms:</i> Bowls, convex wall incurving rim (Gr. 5); flaring with indented band-rim (Gr. 6). Jars, small, multiple grooved rims, round body (Gr. 15); squat, angular shoulder and wall (Gr. 21); large, globular, angular ridge between neck and body (Gr. 18). <i>Other forms:</i> Bowls, small and large with flaring or carinated wall, rounded, everted and overhanging rims (Gr. 1, 3, 4, 7). Jars, small to large, squat biconical body (Gr. 12), large and squat jars with ridged, incised or rounded shoulder (Gr. 23, 24, 25, 29) and miscellaneous or ungrouped forms (Gr. 16, Hg. III, V).	-Haft Tepe, Level 1 assemblage includes Gr. 34, 29, 25, and Gr. 21a type jars; Hg. V large jars Hg. V, and Gr. 3, 9, 19, 33 miscellaneous forms (Mofidi-Nasrabadi 2014a: Pl. 9-16). -Some examples of 'Elamite' (Gr. 25) grey wares (see Carter 1979: 127). -Closest parallels with contemporary Mesopotamian Later Akkadian/UR III forms. -Regional variations during period (e.g. Deh Luran assemblages – Carter and Wright 2010).

Note: Based predominantly on Susa sequences (Gasche 1973; Miroschedji 1981a) and summaries (Carter 1984, 1992) unless specified otherwise; phasing or descriptions from original publications where possible, with reference to Potts (2016). Abbreviations: CZ refers to Choga Zanbil; Gr. to Gasche's type series (Groupes) with numbering system from Susa VR A and B typology; Hg. to Gasche's ungrouped categories; HT to Haft Tepe, for types and description (Negahban 1991) and for excavation levels at Haft Tepe, and additional ceramic data in the Sukkalmah phase (Mofidi-Nasrabadi 2014a), and for Choga Zanbil (Mofidi-Nasrabadi 2007); VR II for later Susa levels (Miroschedji 1981a); TN for Tol-e Nurabad (Potts et al. 2009). References for other sites with useful stratified assemblages including Haft Tepe, Choga Zanbil, Tepe Sharafabad, Tepe Farukhabad, and the smaller exposures in Mamasani are provided in text if not otherwise stated. Images adapted from Carter (1984: Fig. 10–12), based on Miroschedji (1981a, 1981b); and Potts et al. (2009) for Tol-e Nurabad.

Unanswered questions such as these also add to the difficulty of correlating material and historical phases, which continues to be problematic throughout the Elamite period. The placement of these chronological terms in [Table 26.1](#) is by necessity generalised in relation to excavation layers from Susa and other key sites that have been used to define ceramic trends, as are broad classifications of ceramic characteristics. Descriptions of Early Middle Elamite

ceramics were not available for earlier reviews due in part to the paucity of material at Susa and the lack of published data. The Haft Tepe assemblage added important data (Negahban 1991: 25), particularly as evidence of links with highland forms and wares continued (Carter 1992: 295). Haft Tepe ceramics have been described generally as grit-tempered, buff wares (Negahban 1991: 25) but more recently noted to also include vegetal tempered fabrics and show greater variation within the assemblage that can be correlated to different forms (Mofidi-Nasrabadi 2014b: 386). These variations underline the need for regional archaeometric studies to characterise different ceramic pastes and identify variations in technology in addition to descriptions based on visual attributes alone.

Just as the origins of Elam are poorly known, the picture towards the end of the Elamite period is still unclear, and there is uncertainty about the Elamite presence in the Zagros regions of Fars. Much of Tal-e Malyan remains unexcavated, and early Qaleh assemblages are still poorly understood (Carter 1996). The distribution of sites with Neo-Elamite ceramics is mostly concentrated in Khuzestan, but sites in Ram Hormuz contain evidence of this period (see Carter 1994 for summary; Carter 1971, Wright and Carter 2003), as do the Elamite phases of Tol-e Nurabad and Tol-e Spid and surface collections in Mamasani which are only partially investigated (Potts et al. 2009; McCall 2013).

Archaeometric studies

Previous analyses of Elamite ceramics based on petrographic characterisation and neutron activation analysis were carried out at Tal-e Malyan, aimed at investigating observed similarities between lowland and highland wares from Middle Elamite levels, but comparisons with lowland Elamite ceramics and the questions regarding imported versus local manufacture are yet to be systematically addressed (see Carter 1996: 18). It is only recently that inter-site archaeometric analysis from Elamite sites in Khuzestan is becoming more prevalent, with the resumption of excavations at Haft Tepe and Choga Zanbil (Mofidi-Nasrabadi 2014b; Emami 2012; Emami and Trettin 2012). Already these studies have generated quantified data on fabric selection, vessel forming and updated technological studies.

Detailed compositional and optical microscopic analysis of the ceramics from recent fieldwork undertaken at Haft Tepe has helped clarify some of the variation observed in the ceramic pastes (Emami 2012). The results identified locally sourced raw materials that clustered into two main mineralogical and chemical groups that were differentiated by clay preparation and firing technologies. The resultant ceramic groups were interpreted as representing a local transition from one technology to another (Emami 2012: 6).

The same analyses were applied on new excavation data from later Middle Elamite ceramics at Choga Zanbil to investigate ceramic manufacturing during and after this period of Elamite expansion (Emami and Trettin 2012). Samples were selected from a range of vessel

types that spanned the period from c. 1200–700 BC. Different ceramic processing methods were identified based on differing firing temperatures; the choice of raw materials (locally available calcium-rich clays) and inclusions was more consistently selected to match firing choices (Emami and Trettin 2012: 365–366; 375). In addition to site-specific questions, these studies have produced a model for standardised characterisation of Elamite ceramics which could be adopted more widely for future comparative studies, and are especially useful for studying the technological aspects of ceramic production at other sites where kilns have been located. Using this data, it was also possible to show that ceramic raw material differences between Haft Tepe and Choga Zanbil were due to variations in locally sourced raw materials (Mofidi-Nasrabadi 2014b). Compositional analysis has also been used to explore ceramic evidence for the presence of local and non-local ceramics at Tal-i Ghazir, as a correlate for contacts and exchange between sites in the Ram Hormuz plain, the Susiana plain and major sites in Mesopotamia (Alden et al. 2014). Emphasis was on the earlier occupation phases at the site, but a small quantity of Sukkalmah to Middle Elamite sherds were analysed along with local clay samples. The results indicated a combination of two local fabric groups in use, and a lower number of Mesopotamian compositional wares representative of contact between the two areas from the late fifth to early second millennia BC (Alden et al. 2014: 266).

We also see a high degree of consistency in forms and decorations within assemblages and between sites which raises questions about standardised ceramic manufacturing, transference of technology and customs, or the distribution of vessels and their products. Mofidi-Nasrabadi (2014b) examined the seemingly mass-produced Middle Elamite button-based goblets in light of the large numbers of these items at Haft Tepe and Choga Zanbil. Apart from the morphological differences, the earlier Haft Tepe goblets were made of finer fabrics, were more carefully formed and only some showed evidence that the foot was finished by filling with a central lump of clay to seal the bottom of the vessel (Mofidi-Nasrabadi 2014b: 387). This feature was consistently used later at Choga Zanbil and, based on other studies it was proposed that the technique was used to speed up the production process: the lower and upper vessel parts could have been formed separately on the wheel, the base sealed and the two parts joined (Mofidi-Nasrabadi 2014b: Figure 9 and for full references). It was hypothesised that the change in production methods was an internal Elamite development driven by increased demand for mass production following a period of historically attested Elamite expansion and associated building programmes (Mofidi-Nasrabadi 2014b: 395). Results such as this are valuable for approaching changes in ceramic repertoires during the Middle Elamite period. The adoption of similar methods for existing assemblages, particularly in highland areas, may help address questions regarding local versus centralised production methods. This may also be a major factor contributing to the development of simpler and more consistent Elamite ceramic assemblages, a trend that is found throughout the second half of the 2nd millennium BC.

Conclusions and future studies

The variation in forms, size, decoration and contexts in which Elamite ceramics are found embodies a complex, multilayered society where ceramic vessels were used to perform some of the more mundane aspects of everyday life in domestic settings, facilitated social interaction, provided reliable storage and were used to manage resources or enabled long-distance trade; they contributed to town planning and improved public health, and were also elevated into the role of sacred in rituals for both the living and the dead (e.g. Gasche 1973; Potts 2016: 161–ff.; Carter 2011). The assemblages from Susa have hinted at these many roles, the sites of Haft Tappeh, Choga Zanbil and Tal-e Malyan confirm others. However, to understand the specific functions of particular vessel forms and potentially how they were used, and the degree of planning that went into the production of certain forms, will require more inquisitive research designs and methodologies be adopted (e.g. Mofidi-Nasrabadi 2014b). Different forms hint at the highly specific intended functions of certain vessels, indicating well-defined social, economic and religious practices. The later conformity of production methods and forms exhibited within this variation contributes to the highly recognisable character of Elamite ceramics, and can be viewed as evidence of a widespread ceramic technology with potters able to create simple mass-produced forms efficiently, alongside more complicated and durable forms. Further archaeometric analysis will be crucial for understanding innovation and influence displayed in changing ceramic styles and forming methods. Studies of ceramics at all stages of their manufacture and use, from raw materials preparation, forming methods, assemblage makeup, distribution and contents analysis, could answer important questions about their Elamite users and how Elam adapted to changing political conditions from the beginning of the second millennium to the mid-1st millennium BC.

The vessels, and the customs and practices that were embodied within them, are found in many sites and regions throughout the Elamite sphere yet somewhat ironically are better known from the lowland assemblages centred on Susa and surrounding excavated sites. Crucial to understanding the highland realm of Elam will be further comparative studies of the assemblages of the Kaftari to Qaleh periods in Fars and the transition between these two traditions which is still largely unknown, even at Tal-e Malyan (Sumner 1994: 97–99; Carter 1996; Alden et al. 2005: 39–41). Additional research into the ceramics from smaller sites away from the larger capitals, for example, in Ram Hormuz and Mamasani, will also help scholars understand how fragmented regional Elamite settlements functioned and how they interacted with existing local populations (Potts 2016: 145; McCall 2013). The important points to note from this brief review of the background to Elamite ceramic studies is that new data can quickly change existing views and that recourse to multidisciplinary approaches to ceramics can be used to ask different questions that will enhance our knowledge of the Elamite world.

Bibliography

- Alden, J.R., Abdi, K., Azadi, A., Beckman, G. and Pittman, H. 2005. Fars Archaeological Project 2004: Excavation at Tal-e Malyan. *Iran* 43: 39–47.
- Alden, J. R., Minc, L. and Alizadeh, A. 2014. Appendix A: INAA analysis of ceramics from Tall-e Geser and Abu Fanduweh: Compositional signatures and evidence for ceramic exchange. In: Alizadeh, A., Ahmadzadeh, L. and Omidfar, M. (eds.) *Ancient settlement systems and cultures in the Ram Hormuz Plain, Southwestern Iran: excavations at Tall-e Geser and regional survey of the Ram Hormuz area*. Chicago: Oriental Institute, 257–272.
- Alizadeh, A., Ahmadzadeh, L. and Omidfar, M. (eds.) 2014. *Ancient settlement systems and cultures in the Ram Hormuz Plain, Southwestern Iran: excavations at Tall-e Geser and regional survey of the Ram Hormuz area*, Oriental Institute Publications 140. Chicago: Oriental Institute.
- Álvarez-Mon, J. 2012. Elam: Iran's First Empire. In: Potts, D.T. (ed.) *A Companion to the Archaeology of the Ancient Near East*. Chichester: Wiley-Blackwell, 740–757.
- Caldwell, J.R. 1968. Ghazir, Tell-i. *Reallexikon der Assyriologie* 3: 348–355.
- Carter, E. 1971. *Elam in the second millennium B.C.: the archaeological evidence*. PhD Diss., University of Chicago.
- . 1979. Elamite Pottery, ca. 2000–1000 B.C. *Journal of Near Eastern Studies* 38: 111–128.
- . 1980. Excavations in Ville Royale I at Susa: the Third Millennium B.C. Occupation. *Cahiers de la Délégation archéologique française en Iran* 11: 11–134.
- . 1981. Carter, E. 1981. The Elamite Phases. In: Wright, H.T. (ed.) *An Early Town on the Deh Luran Plain: Excavations at Tepe Farukhabad*. Memoirs of the Museum of Anthropology 13. Ann Arbor: The University of Michigan, Museum of Anthropology, 196–223.
- . 1984. Archaeology. In: Carter, E. and Stolper, M.W. (eds.) *Elam: Surveys of Political History and Archaeology*. Berkeley: University of California Press, 103–313.
- . 1992. Ceramics viii. The Early Bronze Age in Southwestern and Southern Persia. *Encyclopaedia Iranica* V (3): 294–297.
- . 1994. Bridging the Gap between the Elamites and the Persians in Southeastern Khuzistan. In: Sancisi-Weerdenburg, H., Kuhrt, A. and Cool Root, M. (eds.) *Achaemenid History VIII: Continuity and Change*. Leiden: Nederlands Instituut Voor Het Nabije Oosten, 65–95.
- . 1996. *Excavations at Anshan (Tal-e Malyan): The Middle Elamite Period*. Malyan Excavation Reports II. Philadelphia: The University Museum of Archaeology and Anthropology, University of Pennsylvania.
- . 2011. Landscapes of death in Susiana during the last half of the 2nd millennium B.C. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*. Winona Lake: Eisenbrauns, 45–58.
- Carter, E. and Wright, H.T. 2010. Ceramic Phase Indicators in Surface Assemblages. In: Wright, H.T. and Neely, J.A. (eds.) *Elamite and Achaemenid Settlement on the Deh Luran Plain*, Memoirs of the Museum of Anthropology 47. Ann Arbor: The University of Michigan Museum of Anthropology, 11–22.
- Emami, M. 2012. QXRD, XRF and Optical Microscopy Applied to Characterization and Provenance of Ancient Ceramics from Haft Tappeh (1500–1150 BC), Southwest Iran. *IOP Conference Series: Materials Science and Engineering* 37: 1–8.
- Emami, M. and Trettin, R. 2012. Mineralogical and chemical investigations on the ceramic technology in Čoġā Zambil (Iran,

- 1250 BC). *Periodico di Mineralogia* 81(3): 359–377.
- Gasche, H. 1973. *La Poterie Élamite du Deuxième Millénaire a.C.* Mémoires de la Délégation Archéologique en Iran, 47. Leiden: E. J. Brill.
- Ghirshman, R. 1966. *Tchoga Zanbil (Dur-Untash). Volume I: La Ziggurat.* Mémoires de la Délégation Archéologique en Iran, 39. Paris: Geuthner.
- Ghirshman, R. 1968. *Tchoga Zanbil (Dur-Untash). Volume II: Temenos, temples, palais, tombes.* Mémoires de la Délégation Archéologique en Iran, 40. Paris: Geuthner.
- McCall, B. 2013. Re-assessing Elamite highland boundaries: New settlement evidence for the Middle and Neo-Elamite periods in the Mamasani valleys, south-western Iran. In: De Graef, K. and Tavernier, J. (eds.) *Archaeological, Philological, Historical and Geographical Perspectives*, Mémoires de la Délégation en Perse 58. Leiden: Brill, 191–206.
- Miroschedji, P. de. 1981a. Fouilles du chantier Ville Royale II à Suse (1975–1977) I. Les niveaux élamites. *Cahiers de la Délégation archéologique française en Iran* 12: 9–136.
- . 1981b. Observations dans les couches néo-élamites au nord-ouest du tell de la Ville Royale à Suse. *Cahiers de la Délégation archéologique française en Iran* 12: 143–167.
- Mofidi-Nasrabadi, B. 2007. *Archäologische Ausgrabungen und Untersuchungen in Čoğā Zanbīl.* Münster: Agenda Verlag.
- . 2014a. Vorbericht der archäologischen Ausgrabungen der Kampagnen 2012–2013 in Haft Tappeh (Iran). *Elamica* 4: 67–167.
- . 2014b. Qualitative Veränderungen in der serienmäßigen Herstellung des Knopfbeckers in der Spätbronzezeit Elams. In: Luciani, M. and Hausleiter, A. (eds.) *Recent Trends in the Study of Late Bronze Age Ceramics in Syro-Mesopotamia and Neighbouring Regions; Proceedings of the International Workshop in Berlin, 2–5 November 2006.* DAI, Orient-Archäologie 32. Rahden/Westfalen: Verlag Marie Leidorf, 385–398.
- . 2015. Ergebnisse der C14-Datierung der Proben aus Haft Tappeh. *Elamica* 5: 7–36.
- Negahban, E.O. 1991. *Excavations at Haft Tepe, Iran.* Philadelphia: The University Museum of Archaeology and Anthropology, University of Pennsylvania.
- Nickerson, J.L. 1983. *Intrasite variability during the Kaftari Period at Tal-e Malyan (Anshan), Iran.* PhD Diss., Department of Anthropology, Ohio State University.
- Petrie, C.A., Asgari Chaverdi, A. and Seyedin, M. 2005. From Anshan to Dilmun and Magan: The Spatial and Temporal Distribution of Kaftari and Kaftari-Related Ceramic Vessels. *Iran* 43: 49–86.
- Pons, N. 1994. Tchoga Zanbil Après Untaş Napiriša. In: Gasche, H., Tanret, M., Janssen, C. and Degraeve, A. (eds.) *Cinquante-Deux Reflexions Sur Le Proche-Orient Ancien: Offertes en Homage à Léon De Meyer.* Leuven: Peeters, 43–51.
- Potts, D.T. 2016. *The Archaeology of Elam: Formation and Transformation of an Ancient Iranian State.* Cambridge: Cambridge University Press.
- Potts, D.T., Roustaei, K., Petrie, C.A. and Weeks, L. (eds.) 2009. *The Mamasani Archaeological Project Stage One: A Report on the First Two Seasons of the ICAR-University of Sydney Expedition to the Mamasani District, Fars Province, Iran,* (2nd edition). BAR 2004. Oxford: Archaeopress.
- Schacht, R.M. 1975. A Preliminary Report on the Excavations at Tepe Sharafabad, 1971. *Journal of Field Archaeology* 2: 307–329.

- Steve, M.-J., Gasche, H. and De Meyer, L. 1980. La Susiane au deuxième millénaire: à propos d'une interprétation des fouilles de Suse. *Iranica Antiqua* XV: 49–154.
- Stolper, M.W. 1984. Political History. In: Carter, E. and Stolper, M.W. (eds.) *Elam: Surveys of Political History and Archaeology*, Berkeley: University of California Press, 3–100.
- Sumner, W.M. 1989. Anshan in the Kaftari Phase: Patterns of Settlement and Land Use. In: De Meyer, L. and Haerinck, E. (eds.) *Archaeologia Iranica Et Orientalis: Miscellanea in Honorem Louis Vanden Berghe*. Ghent: Peeters Press, 135–161.
- . 1994. Archaeological Measures of Cultural Continuity and the Arrival of the Persians in Fars. In: Sancisi-Weerdenburg, H., Kuhrt, A. and Cool Root, M. (eds.) *Achaemenid History VIII: Continuity and Change*. Leiden: Nederlands Instituut Voor Het Nabije Oosten, 97–105.
- Wright, H.T. and Carter, E. 2003. Archaeological Survey on the Western Ram Hormuz Plain. In: Miller, N.F. and Abdi, K. (eds.) *Yeki Bud, Yeki Nabud: Essays on the Archaeology of Iran in Honor of William M. Sumner*, Los Angeles: The Cotsen Institute of Archaeology, 61–82.

CHAPTER TWENTY-SEVEN

The metal arts of Elam



*François Bridey**

Although the beginnings of metallurgy are in large part the result of chance, the proximity of mineral deposits seems to have played a role in triggering the development of the first forms of metalworking. Thus, Anatolia, Palestine and Iran, all three regions naturally rich in minerals, were pioneers in this field. The archaeological excavations carried out in Iran, particularly those in Susa since the end of the 19th century and then on the plateau for the past 30 years, have yielded numerous metal objects as well as metallurgical furnishings and installations which testify to the development of metalwork and the very high technical level reached in certain periods by the metalworkers of the Iranian world. Considering the importance, both in number and quality, of the discoveries it has delivered, the site of Susa is the major reference for the metallurgical production of this region of the Near East, even if excavations have not revealed any metal workshops. Amongst the considerable mass of Susa's metal artefacts are tools, weapons, vessels and ornaments, mainly delivered by burials, as well as small and large statuary, which participate not only in partly defining Elamite art and craft but also our knowledge of the techniques mastered by the metalworkers. This "Elamite" metallurgy, which would concern *stricto sensu* the period extending between ca. 2700 and 525 BC, is nevertheless inseparable from a wider production, which was attested well before the political constitution of the kingdom of Elam, and which has made it possible to determine the technological, typological and stylistic milestones of a history of metallurgy and metal arts in the Iranian world.

Susa I and the beginnings of copper metallurgy (ca. 4200–3800 BC)

Compared to contemporary sites, Susa has produced for the levels corresponding to its foundation and the first period of its occupation (Susa I, ca. 4200–3800 BC) an exceptional metallurgical production as much by the number of objects as by their quality. Most of these

objects are grave goods coming from the Susa I necropolis explored in the years 1906–1908. The thousands of burials excavated here by Jacques de Morgan delivered a total of 50 flat axes similar in shape to stone examples, axes with concave side and narrow heel, about 20 circular mirrors, a pin and an awl (Tallon 1987 : 311–314, Figure 48). This exceptional hoard of metal intended for the dead is relevant to only about 5% of the burials. It therefore seems to be the mark of a nascent social hierarchy, corroborated by the appearance of a figure of authority in contemporary glyptic and the construction of the High Terrace, considered the religious centre of the city by its excavators, whose scale and proportions imply the existence of an organizing power. The copper used for the manufacture of axes and mirrors is in most cases a very pure copper, probably native, or in some cases alloyed naturally with arsenic. The Anarak region in the centre of the country has often been proposed as a possible source of supply for this arsenical copper (Smith 1965; Berthoud 1979: 114 ff.), but no archaeological evidence to date confirms these mines were exploited for these high periods. The axes, which possess a flat face, were cast in open moulds and then hammered in order to form the cutting edge of the head and to thin the poll to favor their hafting. These axes had to be ligated to a wooden handle, but none of them were placed in the burials tied up to their hafts. They were wrapped up in fabric before being deposited in the graves, and many of them have retained traces of it on their oxidised metal surface. The unattested use of these axes as well as their dimensions – up to 23 cm long – and the heavy weight of some specimens suggest they could possibly be axe-shaped ingots (Amiet 1986: 35–36). The mirrors, consisting in simple polished copper discs, were attributed by Morgan to female burials, even if he acknowledged the difficulty of studying and identifying the bones of the deceased. While no perforation is visible, these mirrors have sometimes been interpreted as pendants of a type close to the one carried around the neck of a caprid-headed genius mastering serpents on some contemporary seal impressions (Hole 1992: 30; Amiet 1972: 41, no. 220). At the end of the Susa I period, the shapes of metal artefacts become more complex as well as more functional: axes and hoes now have a hole for the shaft (Tallon 1987: 312, Figure 49). Such objects were still cast in open moulds provided with a removable cylindrical mandrel made of wood or ceramic allowing the creation of a shaft-hole during the casting process. Contemporaneous moulds of this type have been found at Tepe Ghabristan (Madjidzadeh 1979: figs. 2.2 and 3.1–2; Stöllner et al. 2004: 607–608, nos. 103, 104 and 108).

Even if the objects excavated from the deep levels of Susa are not as remarkable as the contemporary productions of the southern Levant, they nevertheless embody the true early stages of a metallurgy hitherto confined to rare and small objects of native copper, and attest to the beginnings of a specialized craft industry. This production demonstrates a wise exploitation of the different properties of metal: the possibility of casting it for the melting of solid objects that are then cold- or hot-worked, its malleability and ductility suited to the production of pins and needles, and its reflective properties to making mirrors.

Metalwork and metallurgy from the Proto-Urban Period (Susa II and III)

In the second half of the 4th millennium, at the beginning of the Proto-Urban period, metallurgy was experiencing new developments. The periodisation of Susa II (Uruk period) and Susa III (proto-Elamite period) is of no consequence to the metalwork, and a continuity of production is attested until ca. 2850 BC, at the end of the Proto-Elamite period. Although Mesopotamia saw the emergence of metallurgy, the Iranian plateau remained the main driver of technological innovations. The use of new metals, the increase of intentional alloys and the development of new shaping and assembling techniques are the most significant features of the period.

In addition to copper, gold, silver and lead are beginning to be used. This phenomenon is particularly visible in Susa, where lead is attested from early Susa II for the manufacture of objects like spouted jars, bowls and cups whose shapes are known in ceramic. Simultaneously, silver was used to fashion jewellery, which shows the development of cloisonné and champlevé techniques. This metal was obtained following a specific refining process, silver requiring the smelting and then cupellation of argentiferous lead ores. This process is well attested from the second half of the 4th millennium on the Iranian plateau, at Tepe Sialk, Arisman or Tepe Hissar (Nezafati et Pernicka 2012). In addition to a tiny dog-shaped bead (Tallon 1987: 265, no. 1162), alleged child burials from Late Uruk levels at Susa delivered a series of silver champlevé pendants enhanced with hematite and gold, a pendant adorned with small doves and quartz beads (Amiet 1966: 87, Figure 46; Stöllner et al. 2004: 656, no. 245) and cruciform pendants inlaid with hematite and gold (Tallon 1987: 263, no. 1159 and 1160). These elements illustrate a new taste for the association of different coloured materials and bear witness to an obvious aesthetic interest in polychromy. Gold is still rarely attested in the early Susa II, but its work and use is illustrated by a small pendant in the shape of a dog (Tallon 1987: 265, no. 1161), and at Tell-e Malyan by a small gold leaf cut in the shape of a leopard (Sumner 2003: Figure 43b).

Apart from the use of new metals, the Proto-Urban period also saw the multiplication of alloys, mainly copper alloys, such as copper-lead and copper-arsenic, the latter being the most widespread. Experimented with since Susa II, the copper-arsenic alloy – increasing the hardness of the metal – became the most common alloy during the 3rd millennium, as evidenced by the analyses carried out on the material from Susa and also from Malyan and Tepe Yahya. It would become the main alloy until the end of the 2nd millennium in eastern Iran and Central Asia. The copper-lead alloy, which offers more fluidity to the metal and thus facilitates the casting process, is circumscribed at Susa to the Susa II levels (Tallon 1987: 362–364).

From a technical point of view, the Proto-Urban period was a time of great innovation. The

bivalve moulds make their appearance as evidenced by collared axes dated to the end of Susa III. Even if no such mould has been found in Susa, they are attested at the same time at the site of Tepe Ghabristan. The lost-wax casting process, which is attested earlier in the southern Levant and further east in Pakistan (Thoury et al. 2016), makes its debut in Iran in the Susa II levels and gives birth to the first metal sculpture, contemporary with the beginnings of stone sculpture in the round. These small elements adorn primarily the head of pins and represent animals such as ibexes, goats and felines, birds sitting on a closed fist and, very rarely, human figures (Tallon 1987: 239–240, no. 967–988). Two small pure copper statuettes representing a man and a woman were found in 1966 and 1968 in the Susa II levels of the Acropole at Susa (Stève and Gasche 1971: 145–147, pl. 12, Spycket 1981: 33–34). In a cruder style compared to the pin-head figurines, the two figures are depicted standing naked, with the arms along the body. Because of the absence of a base or a tenon under their feet, these statuettes could not stand; it is difficult to understand their exact function, their use or the way they were exhibited.

Sheet metalwork is attested for the manufacture of statuettes as a kneeling bull holding a spouted vessel of unknown provenance but attributed to the Proto-Elamite period, and now at the Metropolitan Museum of Art in New York (Hansen et al. 1970). Metal sheets are also used for the making of vessels by hammering or embossing. Metallographic analyses carried out on copper or lead spouted jars from Susa confirm the continuity between the body and the spout without any trace of soldering (Tallon 1987 : 216, no. 780–783 ; 320–321). This latter technique made its appearance at the time of Susa II, as evidenced by the above-mentioned small gold dog-shaped pendant found in Susa in 1939 by Roland de Mecquenem. Despite its small size – only 1.5cm long – this pendant is a comprehensive repertory of the metallurgical techniques mastered by the metalworkers of the Proto-Urban period (Mecquenem 1943: 17, Duval et al. 1987, Tallon 1987: no. 1161). The object was first moulded, according to the lost-wax casting technique, around a clay core in order to save metal. The metal used was not pure gold but an alloy containing 10% silver and 1 to 2% copper. Legs, muzzle, ears and the coiled tail were stretched by successive reheating after the addition of metal. Finally, details such as the coat of the legs or the collar were obtained by cold chasing. But it is above all the presence of a loop allowing the suspension of the object that reveals the skill of Susa's metallurgists. This loop, made from a strip of metal of the same alloy folded on itself, was fixed by soldering, the technical difficulty being to avoid the two elements (pendant and loop) beginning to melt at the moment of their joining. To circumvent this difficulty, the metallurgists used a different gold alloy with 15–20% silver and 5–6% copper for the brazing filler metal. The addition of silver and copper lowered the melting point of the solder metal, allowing joining while preserving the integrity of the two elements to be assembled.

Susa and the beginnings of bronze metallurgy

Bronze objects first appeared in the middle of the 3rd millennium at Susa, at the end of the Susa IV A period. In Mesopotamia, where the rise of metallurgy, especially goldwork, is brilliantly exhibited throughout the 3rd millennium, bronze is known a little earlier, as early as Early Dynastic IIIA, especially in the royal tombs of Ur. In comparison with copper, bronze offers new properties: it is easier to cast because its melting point is lower than that of copper and it is also more resistant. The first bronze objects, however, testify to its use as a precious material: they are often found in the same context as gold and other precious objects and consist of vessels or ornaments more than weapons and tools. The manufacture of these first bronzes – implying the need to obtain supplies of tin – coincides in Mesopotamia with the increasing use of gold and lapis lazuli. The sources of these materials, as well as tin, are found to the east in the alluvial basins of the rivers of Central Asia, and Afghanistan particularly. The route of gold and lapis passing through Susa and ending in Mesopotamia, seemed to be duplicated by a tin route (Pigott 1999: 83–84).

At Susa, the first evidence of tin bronze metallurgy belongs to the so-called *Vase à la cachette* deposit (Tallon 1987: 328–333) found in 1907 on the Susa Acropole mound. By the diversity of its content, this find offers a wide overview of the various crafts of the Iranian world in the middle of the 3rd millennium BC. It included, within two large clay vessels, 48 metal objects as well as five copper ingots, three rings and nine gold beads, a silver ring, a collection of six-cylinder seals, 11 ribbed alabaster vessels characteristic of South-Eastern Iran, a tiny lapis frog-shaped pendant, a sherd of enamelled ceramic and 13 small coloured stones. Metal objects include weapons (axes and daggers), tools (adzes, chisel, shovel, saw, scale), vessels (cups, bowls, carinated vases, strainer), ornaments and toiletries (mirror, bracelets, rings and beads). The shape of several of these objects is inspired in part by forms from Mesopotamia and Luristan. The copper ingots, weighing from 1.4 to 2.9 kg, have a more or less flattened hemispherical form, conditioned by the shape of the crucible in which the copper was isolated. These plano-convex ingots are very common in the Near East, particularly in the Gulf region, but also in the Indus Valley. Detailed chemical analyses revealed a curtailed homogeneity of the composition of these objects made of pure copper or naturally alloyed with arsenic. Beside the copper objects, four items (two vases, a strainer and an adze) with more than 7% tin and two bowls with 2% tin attest to the beginnings of the copper-tin alloy. According to the analyses of the trace elements (cobalt, nickel, iron) of the copper used for the metal artefacts of the *Vase à la cachette* deposit, the Gulf region seems to have been the supply source for the copper (Menu and Tallon 1998). This chemical composition differs from that of the other contemporary metal objects from Susa. Therefore, it appears that Susa metalworkers continued using copper sourced from the centre of the Iranian plateau as much as copper imported from the Oman peninsula, the ancient Magan of the Mesopotamian

sources.

Metal artefacts from the time of Susa IV and Susa V (ca. 2800–1500 BC)

From the 3rd to the beginning of the 2nd millennium, Susa became permeable to Mesopotamian cultural influences, and its metallurgical production expanded and diversified considerably. From a technical point of view, the Susa V levels delivered the first evidence of moulds at the site. These stone bivalve moulds for the manufacture of arrowheads or lances had to be tied closed, only one example showing traces of assembly with tenons and mortises (Tallon 1987: 151).

Shapes show a double influence of Mesopotamia and neighbouring Luristan. In the time of Susa IV, weapons, tools and luxury objects of Mesopotamian types, known in particular through the material of the Royal Tombs of Ur, are reproduced, although the Susa material bears no comparison with the richness and abundance of the Ur finds. Thus, pins from Susa with fingered heads are similar to those of the hair ornaments from the tombs of Ur, and pins ending in a horned genie head were also found at Ur, Kish, Abu Salabikh and Nippur (Tallon 1987: Nos. 899–906 and 990–993). A saw with a curved blade is of the same model as the gold specimen from the tomb of Queen Puabi, also attested in Luristan (Tallon 1987: no. 624). Susa shares with the Luristan several kinds of tools and weapons, such as sleeved axes with straight blade, or tubular mace-heads of which a dozen examples are attested at Susa (Tallon 1987: 130–132, no. 184–187). The production of objects of this type in Luristan, however, is more inventive (Amiet 1976: 8, no. 5–6). From 2600 BC, Luristan became an important centre of metallurgical production according to the discoveries coming from the necropolis from the second half of the 3rd millennium (Haerinck and Overlaet 2008). Vessels, daggers, mace-heads and chariot rein-rings are identical in shape to those found in Sumer but with a more exuberant decoration testifying to a great mastery of the lost-wax technique.

While the tradition of a metal human-scaled statuary appears in Mesopotamia in the imperial workshops of the Akkad period (Braun-Holzinger 1984: 16, no. 49 and 23–24, no. 61) and life-sized sculpture in stone knows its first developments at Susa during the reign of Puzur-Inshushinak (ca. 2120 BC), no trace of metal statuary is attested in Iran for the end of the 3rd millennium. At the time of the domination of the Ur III kings, the foundation deposits of the temples of Inshushinak and Ninhursag on the Acropole mound of Susa yielded an exceptional set, very unique in the Iranian world, of 16 bronze foundation pegs in the name of Shulgi; one of the most coherent and complete foundation sets known to date (Mecquenem 1905a: 63; Tallon 1987: 308–310, no. 1321–1336; Thomas ed. 2016: 299, no. 362). Each figurine was paired with a steatite tablet, and each ensemble was placed in a niche set up in the brick

foundation walls of the two temples dedicated respectively to the god Inshushinak and the goddess Ninursag (Amiet 1976: 48–51, Figure 11–13). The figure – certainly the king himself – is depicted with bare torso, the pectorals are accentuated, and arms raised above the head to hold a basket of bricks. A line indicates the top of a skirt that is not really represented, the lower body merging with the tip of the peg on which the inscription in Sumerian is engraved. These figurines belong to a type well known in Mesopotamia, inaugurated by Gudea of Lagash, and whose iconography – the king as a builder – was known since Early Dynastic III. The Susian pegs were cast rather coarsely and differ from each other in size and some details. They are said to have been cast in bivalve moulds, as evidenced by a visible suture line on the side of some figures (Tallon 1987: 309) but this detail could also be linked to the manufacture of the wax models themselves in bivalve moulds, the figurines having been produced using the now-standard practice of lost-wax casting. The metal used for all 16 pegs is a copper with high silver content, a composition significantly different to the copper mainly used at Susa at the same time. As their iconography suggests, these pegs could therefore certainly have been imported from Mesopotamia.

The excavations at Susa also yielded a bronze hammer bearing the name of Shulgi, decorated with two bird's heads on either side of the collar and a stylized plumage on the poll (Thomas ed. 2016: 351, no. 421). This kind of ceremonial hammer has not been found in Mesopotamia but is well documented at Susa and in Luristan. The same curled plumage ending in loops is still found at the very beginning of the 2nd millennium on a silver votive or ceremonial weapon from a burial at Susa (Tallon 1987: no. 191): the head of this latter hammer is decorated with the head of an animal or a monster. On other weapons of the same type from Luristan or Central Asia, the blade issues from the mouth of a creature that projects from the socket. This particular detail can be seen on the ceremonial weapon offered to Kuk-Simut, chancellor of Idadu II, on the impression of the seal offered to him by the governor of Elam (Amiet 1986: 258, Figure 187). This scene, which can be considered as an “investiture scene”, illustrates the widespread custom in Elam and Central Asia of awarding honorary insignia to deserving dignitaries.

Susa metallurgy at the end of the 3rd millennium and the beginning of the 2nd millennium also indicates links with eastern Iran and Central Asia, the city being at the center of east-west trade. But beyond the formal influences, some objects are direct imports, such as a copper vessel with perforated base with curved lintel motifs whose shape is very similar to stone objects from eastern Iran and Shahdad in particular, arsenical copper compartmented seals and a ceremonial axe whose blade is spat by a dragon head (Tallon 1987: no. 192). This axe, kept through centuries and discovered in the deposit of the temple of Inshushinak assembled during the Middle-Elamite period, bears a decoration suggesting a provenance from Central Asia where the iconography of the one-horned, goateed dragon is well documented between the end of the 3rd and the beginning of the 2nd millennium BC. It is also to the Oxus civilization

that one must certainly attach a presumed pendant in the form of a bird of prey found by Mecquenem among the material of the sarcophagus burials of the Ville Royale mound at Susa (Mecquenem 1934: 210, Figure 53.5). Made in champlévé gold inlaid with blue enamel paste on the wings and tail, it represents a bird in flight, head forward, wings spread and legs folded up to the body. The same iconography and model are found on stone pendants or ornamented metal vessels coming from Central Asia (Amiet 1986: 326, Figure 199; Pittman 1984: 68–69, n°31).

Concerning local productions, the use of bronze is more frequent and became systematic at the very end of the 3rd millennium and at the beginning of the 2nd millennium, especially for the manufacture of weapons, tools and even chariot pieces. Burials of the Susa IV period found on the Ville Royale mound had delivered chariots whose wheel rims were studded with arsenical copper cone-headed nails (Tallon 1987: 297–301). At the beginning of the 2nd millennium, chariot wheel rims are wrapped in copper or bronze bandages (Tallon 1987: 302–306, no. 1304–1307). These rim bandages are all of the same type, formed by an arched groove in the shape of an arc provided with fastening lugs which held a rivet passing through the wheels which could be solid examples. To the same period are dated lost-wax cast lynch pins with head in the form of a hedgehog (Tallon 1987: 306, no. 1308–1309). These pieces are the first attested metal lynch pins decorated with figurative subjects, and inaugurate a tradition that would perpetuate until the Neo-Assyrian and Persian periods. The use of metal for the manufacture of statuary remains limited considering the discoveries from the excavations, while glyptic, coroplasty and rock reliefs remain the privileged means of expression for the refinement and richness of the Elamite civilization during the first centuries of the 2nd millennium. The copper statuette of the “god with the gold hand” is exceptional in this respect (Amiet 1966: 313, no. 234; Spycket 1981: 228 and Pl. 152; Tallon 1987: no. 1337; Tallon, Hurtel and Drilhon 1989: 122–123). Originally entirely covered with a gold plating fixed into the groove along the right side of the body, of which only a tiny fragment remains on the left hand, this statuette represents a standing male deity wearing the traditional horned tiara and a flounced garment. It echoes the Babylonian tradition of bronze statuettes plated with precious metals which are most certainly contemporary (André-Salvini ed. 2008–2009: 73–81).

The same groove characteristic of this particular plating technique is found, without any trace of the original precious metal leaf, on a statuette of a seated god on a chariot consisting of two solid cast bronze pieces (Amiet 1966: 318, no. 238; Tallon, Hurtel and Drilhon 1989: 123–125). The god, dressed in a flounced garment, holds a branch in his left hand, while the right hand is held to the chest. A coiled serpent whose head appears at the top adorns his tiara, whose separately made horns are lost: it may designate the “god with a serpent and flowing waters”. This syncretic figure of the Elamite pantheon is represented by another statuette, dated with uncertainty to the first half of the 2nd millennium. The god is seated on a throne formed by the coils of a snake whose head he holds in his right hand like a sceptre (Amiet

1966: 310, no. 233; Tallon, Hurtel and Drilhon 1989: 12–127). The same iconography is found from the first centuries of the 2nd millennium on seals and sealings belonging to the Sukkalmahs or high-ranking Susian dignitaries (Amiet 1972: Figure 2015, 2016, 2327 and 2330), and on contemporary rock reliefs of Kurangun and Naqsh-e Rostam (Amiet 1966: 386–387, nos. 294–295 and 560, no. 427). The deity is leaning back against a vertical wall adorned at the back with three upright serpents whose heads are distinctly visible at the front. This wall does not seem to represent the back of the throne, which does not appear on the other figurations, but rather the extension of the ground on which it is placed. This statuette belonged probably to a wider three-dimensional representation, perhaps an adoration scene showing a royal worshipper praying to the “god with a serpent and flowing waters”. Some centuries later, the same scene would adorn the upper register of the stele of Untash-Napirisha, king of Anshan and Susa (Miroschedji 1981a).

The Middle-Elamite period (1500–1000 BC): a golden age of Elamite metallurgy

From the 14th century BC, the kingdom of Elam knew its apogee under the reigns of the sovereigns of the Igihalkid dynasty and then, in the 12th century BC, Shutrukids. This period can be considered a golden age for the arts of fire in the Elamite world, both for the glass and faience industry, whose pigments were metal oxides, and for metalworking. Concerning this latter artistic domain, the important discoveries made at Susa are the ultimate testimony to the special place held by Elam in the history of metallurgy in the Near East. An important deposit discovered on 1st January 1904 on the Acropole mound, near the temple of Inshushinak, gathered hundreds of diverse objects of various materials from different periods including tools, weapons, ornaments and small statuary elements (Mecquenem 1905a: 61–130). Originally regarded as a jeweller’s cache, with many shapeless fragments for recasting and numerous silver and gold repoussé disk pendants with rays emanating from a central boss and small bosses, this ensemble was subsequently interpreted as an offering deposit or even as the remains of the funerary material of royal cremation burials similar to those of Choga Zanbil (Amiet 1966: 390). In any case, this deposit contained an exceptional collection of small bronze statuettes of worshippers from the end of the Middle-Elamite period. They are represented with shaved head or wearing the distinctive Elamite visor hairstyle, the right hand raised in a gesture of prayer or sometimes bearing an animal offering (Tallon, Hurtel and Drilhon 1989: 128–131). Belonging to the same tradition are two other worshippers, one in gold, the other in silver, immortalized in the gesture of prayer and offering an animal. These two statuettes were part of the so-called “cache of the golden statuette”, an assemblage of offerings interpreted indifferently as funerary or sacred (Mecquenem 1905b: 131–136 and Harper et al. 1992: 146–

148, no. 89–90). The other objects of the deposit, like a lapis lazuli dove studded with gold or a whetstone with a handle terminating in a gold lion's head, confirm the richness and the refinement of the ensemble.

Representing certainly a royal personage, the two statuettes were lost-wax cast and fixed to a square copper base. The worshippers are both dressed in a skirt with dotted ornament and bordered in the bottom with a row of fringes that rise in front revealing shod feet. The bust does not bear any trace of a garment except small incised stars at the front. Both have a beard with a well-marked moustache and a headdress in the form of a crosshatched cap resembling a net, held at the front by a thick, rolled-up mesh. While the garment recalls certain royal representations of the time of Untash-Napirisha (Amiet 1966: 374, no. 282; Spycket 1981: 199), the hairstyle is unique; it is neither the typical Elamite visor hairstyle worn by Shilhak-Inshushinak on the engraved and inscribed chalcedony bead offered by him to his daughter Bar-Uli (Amiet 1966: 445, no. 340), nor the characteristic double braids that complement Shutruk-Nahhunte's hairstyle on a usurped Kassite stele (Harper et al. 1992: 181–182, no. 117). Traditionally attributed to the Middle Elamite period, the two praying statuettes could be placed earlier in the millennium, at the time of the Sukkalmahs (Pittman 2003).

Besides these precious samples of small metal statuary, Susa has revealed, like no other site, important and inestimable material traces of a monumental metal sculpture. This development is due to the Igihalkid ruler Untash-Napirisha (ca. 1340–1300 BC), who patronized an art of sculpture in the round and in bas-relief unmatched before or after. Although these monuments were made to decorate the temples of the religious capital Choga Zanbil founded by Untash-Napirisha himself, they were found mainly in Susa where they were brought by king Shutruk-Nahhunte in the 12th century BC. The statue of Queen Napirasu, wife of King Untash-Napirisha, is the most brilliant representative of this production (Lampre 1905: 245–250; Amiet 1966: 372; Spycket 1981: 313–314). Found in the temple of the goddess Ninhursag but originally located in a temple of Choga Zanbil, the statue is placed after its Elamite inscription under the protection of the divine triad of the kingdom – the gods Napirisha and Inshushinak, and the goddess Kiririsha – and Beltiya, a goddess assimilated with Ishtar. The queen is represented standing, her right hand covering her left hand, perhaps in a gesture of prayer. This attitude is common to other high-ranking female figures such as Napirasu herself and the king's mother on the large Untash-Napirisha stele, or the Elamite queens represented on the glazed brick reliefs of the *shuter* shrine of the Shilhak-Inshushinak temple (Amiet 1973: 28, Figure 22). The queen wears a short-sleeved dress decorated with dotted circles and adorned on its flared lower portion by a band decorated with dots and zigzags complemented by wavy fringes. A broad vertical strip, embroidered with geometric motifs, adorns the front of the skirt. In addition to this garment, the queen carries around the waist a flounce made of vertical fringes and on her shoulders a shawl made in the same fabric as the dress and held by a palmette-shaped fibula. A comparable garment is worn by the queen on her husband's stele

and by a royal figure represented by a small faience statuette coming from the temple of Pinikir at Choga Zanbil (Ghirshman 1968: Pls 7.1–3). The separately made head, now lost, must have worn either a turban-style headdress as on the female funerary heads found in collective burials of the early Middle-Elamite period at Susa (Harper et al. 1992: 136, n. 84), a bowl-hairstyle as on a small frit head of Choga Zanbil (Amiet 1966: 360, no. 297), or even braided hair decorated with bands of precious metal as on the heads of painted unbaked clay heads found at Haft Tepe (Neghaban 1991: Pls. 24.167 and 169).

The life-sized scale of the statue, its weight of more than 1,750 kg and its manufacturing technique reveal the great skill of Middle-Elamite metalworkers, who had to produce other statues as important but known only in a fragmentary state (Amiet 2006: 71–73). Two successive castings were made, one for the bronze core and one for the shell made of copper alloyed with a low level of tin. It is not yet known precisely which of these two parts was made first: either the manufacture of the core preceded that of the shell (Harper et al. 1992: 132–135), or the core was cast from the already formed outer shell (Meyers 2000). The question remains open and further laboratory examinations should make it possible in the future to know more about the precise technical process used. The groove running along the whole side of the sculpture must have served, as on small sculptures, to fix a plating of gold or silver, but no trace of it was detected. The Near-Eastern metalworkers knew how to hollow cast life-size statues from the Akkadian period, and this particular technique is well documented in Susa at the same time for small figurines (Tallon, Hurtel and Drilhon 1989: 137). The reason for replacing the usual clay core with a bronze nucleus is not clear: the only certainty is that this process seems to be peculiar to the Susian bronzes and was used for the manufacture of the divine busts adorning a contemporary offerings table ornamented with serpents (Morgan 1900a: 106; 1900b: 161; Amiet 1966: 383, Figure 291).

Of the husband of Queen Napirasu, the excavations of Choga Zanbil have yielded among notable metal objects an axe inscribed with the name Untash-Napirisha whose blade issues from the mouth of a lion head (Aruz et al. eds. 2008: 244–245). A small boar figurine adorns the heel. This object of rare value, displays a rich polychromy by playing on the association of different metals: copper alloy for the socket and the blade assembled in two parts, silver plating on the blade and electrum for the boar. A red-colored paste showing traces of calcium and iron oxides was inlaid into the cuneiform signs stating the name of the king. The exuberant decoration of this ceremonial axe – in particular the motif of the blade spat by an animal – recalls the Elamite and Central Asian traditions of the turn of the 3rd and 2nd millennia, of which we find here perhaps one of the last testimonies before the Iron Age productions from Luristan. The object, however, is not unique to the late Bronze Age: an axe from a small palatial temple of Ugarit, consisting of a lost-wax cast copper alloyed socket melted around a meteoritic iron blade and inlaid with gold wire, presents the same decoration of lion and wild boar, and testifies to the same interest in polychromy (Galliano, G. and Calvet

ed. 2004: 166, no. 150).

Making Susa the “museum” of the repatriated masterpieces of Choga Zanbil and those looted from Mesopotamia, the great Shutrukid kings did not patronize an art comparable to the brilliant productions of the reign of Untash-Napirisha. The artistic commissions of Shutruk-Nahhunte and his successors were essentially limited to the decorative panels of moulded bricks, sometimes enamelled, adorning the temples of the tutelary god of the city (Harper et al. 1992: 141–144, no. 88; Amiet 1973). Several bronze elements consisting of palmate, elliptic and pinnate leaves from the so-called foundation deposit of the Inshushinak temple may belong to its architectural decoration (Mecquenem 1905a: 78–80). To the same group belong pointed stems representing date palm leaves, such as those depicted on moulded brick panels adorning the outer wall of the *kumpum kiduya* temple dedicated to the dynastic cult (Mecquenem 1905a: 80, Figure 183; Amiet 1966: 396–397, no. 299). It is also to the architectural domain that two bronze “barriers” inscribed with the name of Shilhak-Inshushinak (ca. 1150–1120 BC) must be attached. Of large dimensions, one of them is more than 4.30 meters long, these two elements may have been made using the technique of sand casting. Their exact function remains enigmatic, but the reading direction of the inscriptions indicates that these two monuments were certainly destined to be placed horizontally, engaged at their two ends, evoking the idea of barriers or lintels more than that of columns (Jéquier 1905: 36; Scheil 1904: 39–55; Pezard and Pottier 1926: 115, no. 270– bis).

Of exceptional interest is a large model delivered by the excavations of the Susa Acropole mound in 1904–1905 (Gautier 1911; Harper et al. 1992: 137–141). This object is unique in all the Near East. According to its Elamite inscription, it is a royal command of Shilhak-Inshushinak and represents a *sit-shamshi*, literally a “sunrise”. In the centre of the plate delimiting a sacred place, two priests in ritual nudity and with head shaved, are crouched face to face. They are carrying out their ablutions, one pouring water on the hands of the other. The scene takes place in an open air space between two stepped buildings, which may represent, without the scale being respected, the two main temples of the Acropole mound of Susa. Various cultic installations surround them, such as offering tables and supports, basins, a large jar and trees evoking perhaps the sacred groves of Elamite religion. All these elements echo similar installations found on the southeast esplanade of the ziggurat of Choga Zanbil, the same place where the rising sun appeared. The exact significance of this cult scene at sunrise, a prelude to the offerings and sacrifices that give rhythm to the day, is not known. The possible discovery of this model in an Elamite tomb may, however, indicate that such a ceremony was held during a royal funeral rite (Amiet 1966: 392, no. 297; Grilot 1983: 12).

Beyond the importance of its representation, this *sit-shamshi* is also a valuable testimony to the high level of technical skill of the Middle-Elamite metalworkers. It consists of a cast support, with pyramidal offering tables, basins and pillars being cast together with it. The two officiants were lost-wax cast, made separately and then fixed to the model. The two temples

and the jar, hollow cast in a different bronze with a higher content of tin and by using copper of a different provenance, according to the analysis of the trace elements, were fixed to the support with pins. The high level of gold and silver detected on the surface of the larger stepped temple indicates perhaps the presence of a precious metal plating (Harper et al. 1992: 140–141).

Another important piece of metalwork from the Middle-Elamite period is an inscribed bronze bas-relief considered by Jacques de Morgan the “first truly Elamite artistic monument” discovered at Susa in 1900 (Morgan 1900c: 163–164; Amiet 1966: 404, no. 305; Börker-Klähn 1982: no. 123). It is, in fact, a fragment of a larger monument whose decoration was organized in at least two registers. In the lower register are engraved two birds pecking among some trees. In the upper register, cast in relief, is a procession of seven warriors oriented to the right. Represented in the attitude of walking, left foot forward, they raise their right hand holding a throwing stick over their head, their left hand holding a bow. They carry a quiver at the back and a dagger slipped into the belt of their short garment. These same warriors, whose attitude and iconography recall the representations of storm gods of the Syro-Anatolian world (Alvarez-Mon 2014: 31), wear a hairstyle with a horn depicted in profile, designating them as divinized royal ancestors or, more probably, warlike divinities. They wear a hairstyle with a single side braid. This same hairstyle, but with a double rather than single side-braid, is worn by royal figures on the already mentioned stele of Shilhak-Inshushinak from Susa (Harper et al. 1992: 181–182, Figure 117) and on the reliefs of Shikaft-i Salman near Izeh-Malamir. These reliefs, usurped by the local king Hanni in the 7th century BC, must be attributed to the time of the Shutruk-Nahhunte dynasty (Jéquier 1901: 32–33; De Waele 1981: 51–52). Even if its iconography and Elamite inscription mentioning sacrifices to non-Susian deities (König 1965: no. 68) may link this monument to the artistic tradition of the Iranian plateau and suggest that it was imported to Susa, perhaps by Shutruk-Nahhunte himself (Amiet 1988: 107), this bas-relief nevertheless belongs technically to the manufacture of the great Middle-Elamite bronzes of Susa.

Rescued from looting, destruction and recycling, all of these great bronze monuments are precious testimonies to an art and to techniques which disappear progressively at the end of the 12th century BC with the taking of Susa by the Babylonians and the beginnings of “dark ages” in the history of the kingdom of Elam.

The metallurgy of the Neo-Elamite period: tradition and renewal

At the end of the 8th century BC, archaeological and epigraphic sources attest to the rebirth of Susa and the brief renewal of the Elamite kingdom, before its destiny became definitively tied

into the empire of Cyrus the Great. In Susa, the luxurious material found in large family tombs reveals in particular this renewed prosperity (Amiet 1966: 480–481). The metalwork appears, in light of the discoveries, less prosperous than in the 2nd millennium BC, and bears witness to the affinities of Susiana with Luristan and the cultures of northern Iran, between the Lake Urmiah and the Caspian Sea. Amongst the jewellery are gold earring pendants in the shape of a bunch of grapes with granulated decoration of a type dating back to the last centuries of the 2nd millennium BC and widely spread in Northern Iran, at Marlik, Hasanlu and up to Tepe Sialk (Amiet 1966: 475, no. 357; Neghaban 1989: 183–186, Pl. II; Ghirshman 1938–1939: XCV, S. 1476b and S. 1755). Long pins with a stem of iron – a metal that made its first appearance at the turn of the 2nd and 1st millennia BC – are characteristic of the Neo-Elamite period. Their biconical or ovoid heads are modelled in bitumen mixed with siliceous earth, and clad with copper or gold sheets. The most beautiful examples bear filigree decoration (Miroschedji 1981b: Figure 40, no. 4–5, Connan and Deschenes 1996: 371–374, no. 492a-h, no. 493a-e). Such pins have also been discovered in Luristan (Vanden Berghe 1973: 25, Figure 28–29), and in a Neo-Elamite princely tomb near Ramhormoz, where the most precious specimens are enhanced with chalcedony (Shishegar 2015: 22, Figure 11, no. 6.1–6.19).

Copper alloy bracelets with ends flattened into the shape of a fan are also characteristic of the same period, while others ending in animal head terminals initiate a tradition that would have a great future in the Achaemenid period. One of the Neo-Elamite vaulted tombs at Susa also delivered a pair of bronze handles originally belonging to a platter or basin (Amiet 1966: 476–477, no. 358). They are each decorated with a passant bull related stylistically to figures that adorn contemporary faience vessels. This kind of handle is known especially from Hasanlu, where at least three basins with handles are attested. Two pairs of these handles in particular, one decorated with birds of prey and another with a kneeling hero mastering two ibexes, present the same curved-shape elements to facilitate the prehension of the object (Muscarella 1988: 26–29, no. 6 and Figure 4; Winter 1980: 92, fig).

Metal statuary, if such an artistic production had been maintained, is very poorly represented for this period. The “find of the silver mask” discovered by Morgan in the Acropolis mound in 1903 is a rare example (Morgan 1905: 43–47, Pl. VII–IX). This heterogeneous deposit of objects was found in a wooden trunk with metallic garnitures, and contained, besides cylinder seals, a silver mask and hands belonging to the figure of a worshipper presenting an offering. These elements must have been originally applied to a statue of wood or other organic material that has now disappeared. A silver head of a sceptre in the shape of a serpent and two faience wigs decorated with bronze, gold or silver nails completed this deposit. These elements provide evidence of a new well-established tradition of composite statuary. The statuette of a worshipper with a dog from the early excavations carried out by Marcel and Jane Dieulafoy in 1885–1886 is the only testimony of a small, cast sculpture at Susa (Dieulafoy 1893: 278–279). The bearded figure, wearing a garment crossing

over his chest, carries his right hand in front of his mouth as a sign of prayer, and the other holds a large seated dog by its neck. Similar figurines have been found in Mesopotamia, at Isin or Nippur, and also in Greece at the Heraion of Samos among a series of bronze objects imported from Babylonia (Braun-Holzinger 1984: 93–96, Pl. 62–64). The statuette of Susa is certainly also of Babylonian origin. These worshippers with a dog were sometimes considered as protective figures of the buildings with which they were associated, but they could instead be votive offerings made to Gula, goddess of medicine, whose animal attribute was a dog (Thomas ed. 2016: 243, No. 267).

These few elements from Susa are completed for the Neo-Elamite period by the contemporary material of the tombs of Arjan and Ramhormoz. These two well-dated assemblages each offer important testimonies to the Elamite metal art, still alive in the 1st millennium BC. Discovered in 1982, the so-called Arjan tomb, in the vicinity of the modern town of Behbahan, delivered an exceptional assemblage, including four metal objects inscribed with the name “Kidin-Hutran, son of Kurluš”, dated 600–575 BC (Álvarez-Mon 2010a). The tomb contained a U-shaped bronze coffin in which the body lay surrounded by precious material including: numerous rosette-shaped gold appliques that had originally adorned a cotton garment; an iron-bladed dagger with an ivory guard decorated with granulated gold leaf, a rosette encrusted in *champlevé* and an agate mounted in gold; a silver straw fitted with a filter; and an exceptional gold “ring” flattened at its extremities into a fan. This unique object, whose shape recalls bracelets known in Elam since the 2nd millennium BC, is adorned on each finial disc with two lion-headed griffins in heraldic position on either side of a small palmette motif. Although this motif belongs to a well-established tradition in Elam, it is nourished here by Assyrian and Babylonian influences, and announces the figures of griffins favoured by the artists of the Achaemenid period. Outside the coffin were a silver jar, and a series of objects in bronze: a candelabrum, a conical-shaped lamp, a jar, a rhyton with four heads of lions engraved at the lip-level with a series of running ostriches, a bowl with engraved decoration and ten chalice-like vessels (Alizadeh 1985; Álvarez-Mon 2010a). The bowl, assimilated with Syro-Phoenician productions, mixes Egyptian, Assyrian and Elamite influences. Its decoration is organised within concentric registers that depict scenes of hunting, tribute offering, banqueting and music, exalting the royal function and delivering a cosmological vision of the world (Majidzadeh 1990; Álvarez-Mon 2004). The 75 cm high candelabra, with its summit supported by six lions and its triangular pedestal decorated with figures of atlantes and lions, and finished with bull protomes, testifies to the vitality of an Elamite art whose formulas strongly announce the art of the Achaemenid period (Álvarez-Mon 2010b).

Candelabras of the same type but with less exuberant decor were found in the Ramhormoz tomb discovered in 2007, containing two bronze U-shaped “bathtub” coffin burials identified as belonging to princesses of the house of king Shutur-Nahhunte, son of Indada (Shishegar

2015). These coffins were made of metal sheets assembled and riveted together by strips of bronze, according to a technique already seen at Arjan. Besides the similarities with the tomb of Arjan, these sarcophagi are related to a tradition also attested in Ur and Nimrud in the 8th and 7th century BC (Wicks 2015). The grave goods included several hundred objects of gold, silver, bronze and iron, as well as stone and faience. These finds included five more candelabras: a complete example and two fragmentary ones with a triangular pedestal decorated with bulls or horses and two of a simpler form with a tripod base with feet ending in duck heads. The tomb also delivered a great number of small appliqués intended to be sewed onto fabrics, bracelets and gold beads, sometimes enhanced with semi-precious stones. There were also “rings” with fan-shaped flattened ends characteristic of the Neo-Elamite period and already encountered in a developed form at Arjan (Shishegar 2015: 145–146), and gold bracelets with solid cast or inlaid limestone terminals in the shape of lion or gazelle heads which announce Achaemenid productions (Shishegar 2015: 153–155). A large flat gold bracelet decorated with granulation and chalcedony is to be compared with the discoveries made in the royal tombs of Nimrud (Shishegar 2015: 159–160, Oates and Oates 2001: Pl. 6a). Among the many vessels in bronze or silver, chalices and vessels of the “ink-well” type are the most characteristic (Shishegar 2015: 330–332 and 336–338; Wicks forthcoming a). These latter vases, made from hammered metal sheet, all have a slightly tapered neck with a very flared rim, a well-defined shoulder, almost horizontal and a belly with a moulded profile. This type of vessel is well documented in the main Iron Age III Luristan sites, at Susa, and also in the Neo-Babylonian levels of Uruk (Mecquenem 1943: 50, Figure 42, Figure 4 and 6; Miroschedji 1981b: Pl. 40.12; Haerinck and Overlaet 1999: 30; 2004: Pl. 142–143). In the tomb of Ramhormoz, a variant of these vessels is provided with a handle and a long double-elbowed spout, making them look like teapots (Shishegar 2015: 340–341 and 367). But the most exceptional pieces are large, shallow circular dishes with a long handle, adorned at the junction of the dish and the handle with a cast figure of a woman-fish, fixed using small rivets. Five examples in bronze – of which only one is complete – and a complete silver copy were deposited in the tomb (Shishegar 2015: 302, 304–309 and 372–373; Wicks forthcoming b). The small ornamental figurines represent women wearing a flounced dress, bracelets and a heavy necklace whose counterweight descends down the back. The base of their back extends into the body of a fish whose head is not represented. Their plaited bouffant-style hair looks like one of the two votive wigs from “the find of the silver mask” at Susa (Morgan 1905: Pl. IX) and the coiffure of the spinning-woman depicted on a bitumen bas-relief of the same origin (Amiet 1966: 540, Figure 413). The seated fish-women stretch out their hands as if to present an object. A similar figure belongs to the collections of the British Museum, said to be from Tang-i-Sarvak in the Bakhtiari mountains (Amiet 1966: 314–315, no. 235). The association of an anthropomorphic and zoomorphic figure could suggest that these were representations of divinities, although they are devoid of a horned tiara or any other divine emblem. They could also be figures of

worshippers, like the figure represented standing, hands clasped, dressed and coiffured in a similar way, most certainly serving as a handle of an unidentified instrument (a mirror?), from the same grave (Shishegar 2015: 312). Mirrors, combs and weapons with iron blades, further complemented the rich furnishings of these burials.

The metallic material of the Neo-Elamite period, even if it reveals no technical innovation, except for the use of iron, which would become widespread in the following centuries, testifies to the renewed vitality of an art that had developed immensely during the 2nd millennium BC. These pieces, as well as stone sculptures, attesting of important iconographic developments, allow us to glimpse the originality of an art that was able to renew and enrich the canons inherited from classical Elamite art, drawing from beyond the Iranian world in the Assyrian or Babylonian repertoires and initiating stylistic evolutions that would be set in the Achaemenid period. The precious vessels and goldwork of which the Persians were particularly fond, according to Greek historians, or the rare testimonies of metal sculpture, bear witness to an ever-greater concern for refinement as well as for an eclectic and cosmopolitan style, synthesizing the expressions of the present and the inheritances of the past for translating the ideal of tolerance and universalism of the Persian kings.

Notes

* — Translated from French by Javier Álvarez-Mon and Yasmina Wicks.

Bibliography

- Alizadeh, A. 1985. A Tomb of the Neo-Elamite Period at Arjan, Near Behbahan. *Archäologische Mitteilungen aus Iran* 18: 49–73.
- Álvarez-Mon, J. 2004. Imago Mundi: Cosmological and Ideological Aspects of the Arjan Bowl. *Iranica Antiqua* 39: 203–237.
- . 2010a. *The Arjan Tomb: at the Crossroads between the Elamite and the Persian Empires*, Acta Iranica Series 49. Louvain.
- . 2010b. The Arjan Stand Candelabrum. In: Abdi, K. (ed.) *Mazdasn Shapur ke chihr az yazdan: Essays in Memory of A. Shahpur Shahbazi*. Tehran.
- . 2014. Like a Thunderstorm: Highland Elamite “Storm-God” Warriors. *Annali* 74:17–46.
- Amiet, P. 1966. *Elam*. Auvers-sur-Oise, Archée, 1966.
- . 1972. *Glyptique susienne, des origines à l’époque des Perses achéménides*. Mémoires de la Délégation Archéologique en Iran XLIII, 2 vol. Paris: Librairie orientaliste Paul Geuthner.
- . 1973. Disjecta Membra Aelamica. Le décor architectural en briques émaillées à Suse. *Arts Asiatiques*, 32/1: 13–28.
- . 1976. *Les Antiquités du Luristan*. Collection David-Weill, Paris, Diffusion de Boccard.
- . 1986. *L’âge des échanges inter-iraniens, 3500–1700 avant J.-C.* Paris: Réunion des Musées Nationaux.

- . 1988. *Suse, 6000 ans d'histoire*. Paris: Réunion des Musées Nationaux.
- . 2006. Bronzes oubliés de Suse. *Revue d'Assyriologie et d'archéologie orientale* 100: 71–74.
- André-Salvini, B. (ed.) 2008–2009. *Babylone. A Babylone, d'hier et d'aujourd'hui*, exhibition catalogue, Musée du Louvre, Paris: 73–81.
- Aruz, J., Benzel, K. and Evans, J.M. (eds.) 2008. *Beyond Babylon. Art, Trade, and Diplomacy in the Second Millenium B.C.* New York: The Metropolitan Museum of Art.
- Berthoud, T. 1979. *Etude par l'analyse de traces et la modélisation de la filiation entre minerais de cuivre et objets archéologiques du Moyen-Orient (Ive et IIIe millénaires avant notre ère)*. PhD Diss., Université Pierre et Marie Curie, Paris.
- Börker-Klähn, J. 1982. *Alt Vorderasiatische Bildstelen und vergleichbare Felsreliefs*. Baghdader Forschungen 4. Mayence: Philip von Zabern.
- Braun-Holzinger, E.A. 1984. *Figürliche Bronzen aus Mesopotamien*, Prehistorische Bronzefunde, ser. 1, vol. 4. Munich: C. H. Beck'sche.
- Connan, J. and Deschenes, O. 1996. *Le bitume à Suse: collection du Musée du Louvre*. Paris: Éditions de la Réunion des Musées Nationaux.
- De Waele, E. 1981. Travaux archéologiques à Sekaf-e Salman et Kul-e Farah près d'Izeh (Malamir). *Iranica Antiqua* 16: 45–62.
- Dieulafoy, M. 1893. *L'Acropole de Suse d'après les fouilles exécutées en 1884, 1885, 1886 sous les auspices du Musée du Louvre*. Paris: Hachette.
- Duval, A-R., Eluère, C., Hurtel, L. and Tallon, F. 1987. La pendeloque au chien de Suse. Étude en laboratoire d'une brasure antique. *Revue du Louvre* 3: 176–179.
- Galliano, G. and Calvet, Y. (ed.) 2004. *Le royaume d'Ougarit. Aux origines de l'alphabet*. Exhibition Musée des Beaux-Arts, Lyon. Paris: Somogy.
- Gautier, J.-E. 1911. Le *sit samsi* de Silhak In Susinak. *Mémoires de la Délégation en Perse* XII. Paris: Ernest Leroux, 143–151.
- Ghirshman, R. 1938–1939. *Fouilles de Sialk, près de Kashan, 1933, 1934, 1937*, I, Musée du Louvre, Département des Antiquités orientales, Série archéologiques, IV, Paris, Paul Geuthner.
- . 1968. *Tchoga Zanbil (Dur-untash)*, vol. II, *Temenos, temples, palais, tombes*. Mémoires de la Délégation Archéologique in Iran XL. Paris: Paul Geuthner.
- Grillot, F. 1983. Le *shuter* royal de Suse. *Iranica Antiqua* 18: 1–24.
- Haerinck, E. and Overlaet, B. 1999. *Djub-i Gauhar and Gul Khanan Murdah, Iron Age III sites in the Aivan plain, Luristan* Excavation Documents III, Acta Iranica, 36, Louvain: Peeters.
- . 2004. *The Iron Age III Graveyard at War Kabud, Pusht-i Kuh, Luristan*. Luristan Excavation Documents V, Acta Iranica, 42. Louvain: Peeters.
- . 2008. *The Early Bronze Age at Kalleh Nisar, Luristan Pusht-i Kuh*. Luristan Excavation Documents VII, Acta Iranica 46. Louvain: Peeters.
- Hansen, D., Lefferts, K.C. and Alexander, S.M. 1970. A Proto-Elamite Silver Figurine in the Metropolitan Museum of Art. *Metropolitan Museum Journal* 3: 5–26.
- Harper, P.O., Aruz, J. and Tallon, F. (eds.) 1992. *The Royal City of Susa. Ancient Near Eastern Treasures in the Louvre*. New

- York: The Metropolitan Museum of Art.
- Hole, F. 1992. The Cemetery of Susa: an Interpretation. In: Harper, P.O., Aruz, J. and Tallon, F. (eds.) *The Royal City of Susa. Ancient Near Eastern Treasures in the Louvre*. New York: The Metropolitan Museum of Art, 26–31.
- Jéquier, G. 1901. Description du site de Malamir. *Mémoires de la Délégation en Perse* III. Paris: Ernest Leroux: 133–142.
- . 1905. Fouilles de Suse, 1899–1900, 190–1901, 1901–1902. *Mémoires de la Délégation en Perse* VII. Paris: Ernest Leroux, 9–41.
- König, F.W. 1965. *Die elamischen Königsinschriften*. Archiv für Orientforschung, bei. 16, Graz.
- Lampre, G. 1905. Statue de la reine Napir-Asou. *Mémoires de la Délégation en Perse* VIII. Paris: Ernest Leroux, 245–250.
- Madjidzadeh, Y. 1979. An Early Prehistoric Coppersmith Workshop at Tepe Ghabristan. In: Akten des VII. Internationalen Kongresses für Iranische Kunst und Archäologie, Munich, 7–10 septembre 1976, *Archäologische Mitteilungen aus Iran*, Ergänzungsband 6.
- Majidzadeh, Y. 1990. The Arjān Bowl. *Iran* 30: 131–144.
- Mecquenem, R. de. 1905a. Offrandes de Fondation du Temple de Chouchinak. *Mémoires de la Délégation en Perse* VII. Paris: Ernest Leroux, 61–130.
- . 1905b. Trouvaille de la statuette d'or. *Mémoires de la Délégation en Perse* VII. Paris: Ernest Leroux, 131–136.
- . 1934. Fouilles de Suse, 1929–1933. *Mémoires de la Délégation en Perse* XXV. Paris: Ernest Leroux, 177–237.
- . 1943. Fouilles de Suse, 1933–1939. *Mémoires de la Mission Archéologique en Perse* XXIX. Paris: PUF, 3–161.
- Menu, M. and Tallon, F. 1998. Métallurgie du bronze au Proche-Orient au IV^e millénaire: le vase à la cachette. *Technè* 7: 17–18.
- Meyers, P. 2000. The casting process of the statue of queen Napir-Asu in the Louvre. *Journal of Roman Archaeology*, Supplementary Series 39: 11–18.
- Miroschedji, P. de. 1981a. Le dieu élamite au serpent et aux eaux jaillissantes. *Iranica Antiqua* 16: 1–25.
- . 1981b. Fouilles du chantier Ville Royale II à Suse (1975–1977). I. Les niveaux élamites. *Cahiers de la Délégation archéologique française en Iran* 12: 9–136.
- Morgan, J. de. 1900a. Travaux au tell de la citadelle. *Mémoires de la Délégation en Perse* I. Paris: Ernest Leroux, 81–138.
- . 1900b. Table de bronze. *Mémoires de la Délégation en Perse* I. Paris: Ernest Leroux, 161–162.
- . 1900c. Bas-relief de bronze. *Mémoires de la Délégation en Perse* I. Paris: Ernest Leroux, 163–164.
- . 1905. Trouvaille du masque d'argent. *Mémoires de la Délégation en Perse* VII. Paris: Ernest Leroux, 43–47.
- Muscarella, O.W. 1988. *Bronze and Iron, Ancient Near Eastern Artifacts in the Metropolitan Museum of Art*. New York: The Metropolitan Museum of Art.
- Neghaban, E.O. 1991. *Excavations at Haft Tepe, Iran*. University Museum Monograph 70. Philadelphia: University of Pennsylvania.
- . 1989. Pendants from Marlik. *Iranica Antiqua* 24: 175–208.
- Nezafati, M. and Pernicka, E. 2012. Early Silver Production in Iran. *Iranian Archaeology* 3: 38–45. Oates, J. and Oates, D. 2001. *Nimrud: An Assyrian Imperial City Revealed*. London: The British School of Archaeology in Iraq.
- Pézarid M. and Pottier, E. 1926. *Catalogue des Antiquités de la Susiane*, 2nd Ed. Paris: Musées Nationaux.
- Pigott, V.C. 1999. The Development of Metal Production on the Iranian Plateau: An Archaeometallurgical Perspective. In: V.C.

- Pigott (ed.) *The Archaeometallurgy of the Asian Old World*, University Museum Monograph 89. Philadelphia, 73–106.
- Pittman, H. 1984. *Art of the Bronze Age: Southwestern Iran, Western Central Asia, and The Indus Valley*. New York: The Metropolitan Museum of Art.
- . 2003. Reconsidering the *Trouvaille de la statuette d'or*. Late Sukkalmah Period at Susa. In: Miller, N.F. and Abdi, K. (eds.) *Yeki bud, yeki nabud. Essays on the Archaeology of Iran in Honor of William M. Sumner*, Monographs Series, 48. Los Angeles: Cotsen Institute of Archaeology, University of California, 177–191.
- Scheil, V. 1904. Barrière de bronze. Inscription de Silhak In Susinak. *Mémoires de la Délégation en Perse* V. Paris: Ernest Leroux, 39–55.
- Shishegar, A. 2015. *Tomb of the Two Elamite Princesses of the House of King Shutur-Nahunte son of Idada, Neo-Elamite period, Phase IIIB* (ca. 585–539 B.C). Tehran: ICHTO.
- Smith, C.S. 1965. The Interpretation of Microstructures of Metallic Artefacts. In: Young, W.J. (ed.) *Applications of Science in the Examination of Works of Art*. Boston: Museum of Fine Arts, 20–52.
- Spycket, A. 1981. *La statuaire du Proche-Orient ancien*. Handbuch der Orientalistik, Abteilung 7, Kunst und Archäologie, vol. 1, Der Alte Vordere Orient, part 2, Die Denkmäler. B, Vorderasien, Lfg. 2, Leiden and Cologne: E. J. Brill.
- Stève, M-J. and Gasche, H. 1971. *L'Acropole de Suse*. Mémoires de la Délégation Archéologique en Iran XLVI. Paris: Paul Geuthner.
- Stöllner, T., Slotta, R. and Vatandoust, A. 2004. *Persien Antike Pracht. Bergbau – Handwerk – Archäologie*. Bochum: Deutschen Bergbau-Museum.
- Sumner, W.M. 2003. *Early Urban Life in the Land of Anshan: Excavations at Tal-e Malyan in the Highlands of Iran*, Malyan Excavation Report, vol. 3. Philadelphia: University of Pennsylvania Museum.
- Tallon, F. 1987. *Métallurgie susienne*, 2 vols. Paris: Réunion des Musées Nationaux.
- Tallon, F., Hurtel, L. and Drilhon, F. 1989. Un aspect de la métallurgie du cuivre à Suse. La petite statuaire du II^e millénaire avant J.-C. *Iranica Antiqua* 24: 121–158.
- Thomas, A. (ed.) 2016. *L'Histoire commence en Mésopotamie*. Lens: Musée du Louvre-Lens.
- Thoury, M., Mille, B., Séverin-Fabiani, T., Robbiola, L., Réfrégiers, M., Jarrige, J.-F. and Bertrand, L. 2016. High Spatial Dynamics-Photoluminescence Imaging Reveals the Metallurgy of the Earliest Lost-Wax Cast Object. *Nature Communication* 7, Article no. 13356 (2016) doi:10.1038/ncomms13356.
- Vanden Berghe, L. 1973. Le Luristan à l'âge du Fer. La nécropole de Kutal-i-Gulgul. *Archaeologia* 65: 17–29.
- Wicks, Y. 2015. *Bronze 'Bathtub' Coffins in the Context of 8th-6th Century Babylonian, Assyrian and Elamite Funerary Practices*. Oxford: Archaeopress.
- . forthcoming a. Vessels of Note: The Bronze “Inkwells” of Luristan and Elam. *Iranica Antiqua* 53.
- . forthcoming b. Female, Fish and Frying Pan: An Enigmatic Funerary Object Unique to Elam, In: K. De Graef, E. Gorris and J. Tavernier (eds.) *Susa and Elam. History, Language, Religion and Culture: Proceedings of the Second Susa and Elam Conference Held at Université catholique de Louvain, July 6–9, 2015*. Leiden: Brill.
- Winter, I.J. 1980. *A Decorated Breastplate from Hasanlu, Iran*. Hasanlu Special Studies I: University Museum Monograph 37. Philadelphia: University of Pennsylvania.

CHAPTER TWENTY-EIGHT

The industry of vitreous materials in Elam



*Noëmi Daucé**

In the introduction to his seminal work, Pierre Amiet in 1966 highlighted “the fundamental originality” of Elam (Amiet 1966: 24), an entity whose chronological and geographical boundaries were still to be detailed. At that time, Elamite civilization was primarily documented through excavations conducted at Susa, Choga Zanbil and Haft Tepe, supplemented by Elamite and Mesopotamian cuneiform sources. This originality results firstly from its unique alliance of complementary territories, the Susiana Plain on one side and the mountainous hinterland of Iran’s southwest on the other, and secondly from its material culture which, although regularly subject to the influence of its Mesopotamian neighbours, outlines the contours of a consistent cultural community. The industry of glass materials, which expanded in the second half of the second millennium BC and was nourished by Syro-Mesopotamian innovations while adapting to new media and new functions, certainly epitomizes one of the superior facets of Elamite culture.

Considered as vitreous materials are all artificial materials entirely or partially vitrified, namely, besides glass, all objects covered with vitreous glaze, whatever the nature of their media: soft rock, siliceous paste or a clay paste. The nature of these materials, which poorly resist the conditions of burial, has long represented a hindrance for archaeologists. In 1994, Roger Moorey deplored the lack of research on these materials as well as the wide disparities between terminologies used in the archaeological literature, terminologies which vary from one language to another (Moorey 1994: 166). This lacuna has been largely filled in the course of the past two decades, particularly in the context of research specifically dedicated to siliceous paste.

Pierre Amiet’s publication (1966; 1967) and 20 years later Suzanne Heim’s (1989) doctorate devoted to Elamite glazed architectural decoration, as well as the important work of Moorey, can be regarded as precursors. Subsequently, the development of research programs dedicated to vitreous materials and the development of archaeometry opened the way for the exploration of new problems, in particular the identification of raw materials, techniques and their circulation and transfer. In the early 2000s, the department of the Near Eastern

Antiquities in the Musée du Louvre and the *Centre de Recherche et de Restauration des Musées de France* led major campaigns of scientific analyses of vitreous material in the collections department (Caubet et al. 2007). A temporary exhibition *Faïences antiques, de l'Égypte à l'Iran* (Caubet and Pierrat Bonnefois 2005) allowed the observation of this production on a larger scale under the prism of Egyptian and Mesopotamian production. The important work led by M.S. Titus and A.J. Shortland at Oxford University has also shed light on this specific production.

Before exploring the peculiarities of Elamite production using examples from the sites of Susa, Choga Zanbil, Haft Tepe and Anshan (Tell -i Malyan), integrated into the wider context of vitreous material industry in the Near East, we will first outline the terminology now unanimously accepted to describe the different types of materials that are the subject of this review.

With the exception of glazed baked clay, vitreous materials are made from similar, easily accessible, ingredients: sand, quartz powder and plant ash provide their main components, namely, silica, lime, soda and potash. They only differ in recipes and proportions. However, to manufacture these synthetic materials requires specialized craftsmen with highly developed skills, able, among other competencies, to control high temperatures. As such, objects in vitreous materials have long been considered objects of prestige and ceremony. The following development explores differences and similarities amongst archaeological faïence, frit, glass and glazed terracotta.

Archaeological faïence

Since the mid-twentieth century, archaeological faïence has been defined as an artificial material made of siliceous paste covered with glaze. The nature of this paste distinguishes it from modern faïence: clay ceramics with lead glaze opacified with tin that were produced from the beginning of the fifteenth century in the Italian city of Faenza. The popularity of these products was such that the name of the city was bequeathed to them.

The body of archaeological faïence is a mixture composed of more than 90% of a fine powder of quartz or sand to which is added an alkali flux to lower the melting temperature and water to make it plastic and malleable. In Elam, this alkali flux is mainly made of vegetable ash (Caubet et al. 2007: 26). Shaping and glazing are performed before firing. Because of their viscosity, siliceous pastes are difficult to turn. In the Elamite world, as in Mesopotamia and Egypt, artisans therefore favour modeling and molding techniques for making figurines, decorative bricks and plates, vases, cylinder seals and faïence beads.

The glaze, alkaline in antiquity, is applied after shaping. It is most often a liquid paste composed of the same ingredients as glass but with a higher concentration of silica and a lower concentration of lime. This paste is coloured by the addition of metal oxides: copper

oxide, which gives a green or blue color, is the most frequently used colorant in the early periods; lead antimonate is later used for yellow; cobalt blue for a more intense blue; manganese oxide and iron for black or brown glazes. Glaze may be applied to different supports: soft rocks, siliceous paste or clay paste, they transform their appearance and impart colour, gloss and impermeability. In the Elamite world, glazes are applied exclusively by immersion or painting, the glaze being then applied to its support with a brush.

Firing between 800°C and 1000°C results in the cementing in the vitreous phase of the quartz grains comprising the body of the faience and in the vitrification of the surface glaze. After firing, faience becomes generally whitish and coarse grains are visible to the naked eye. It is more or less friable and takes on an aspect sometimes qualified as saccharoidal (Caubet et al. 2007: 13). Faience differs from glass only in its firing temperature, which is less elevated.

As all publications devoted to this material highlight, the origins of faience production in the Near East, in Egypt or in the Indus Valley (Bouquillon and Barthelemy Saizieu 2000), are little known. Because of their nature and state of conservation, beads and small adornments were little documented during early excavations. Moreover, the earliest objects in faience are sometimes difficult to identify and to distinguish from frit or soft stone ornaments such as those in glazed steatite. Considering the territory that would later correspond to the Elamite world, Moorey (1994: 172) cites the discovery of a blue faience bead at the site of Tall-i Mushki in Fars, in a level dating to the end of the 7th millennium BC, contemporary with the Mesopotamian culture of Hassuna. According to the evidence, however, this bead was intrusive in an earlier level. Some isolated findings likely reflect the occurrence and the development of faience techniques from the sixth and fifth millennium. For instance, the grave of a child at Qabr Sheykheyn in Khuzestan delivered some bracelets of faience beads at the end of the fifth millennium (Moorey 1994: 172). Nonetheless, these attestations are still very rare compared, for instance, to the thousands of glazed steatite and faience beads attested in North Syria during the same period. Faience becomes only truly visible in the end of the fourth millennium in Iran.

Frit

Frit, which is often confused with faience, is made of the same ingredients but is not covered with glaze (Moorey 1994: 167). In the industry of vitreous materials, metal oxides used as colorants are sometimes unstable: they are water-soluble or volatile at high temperatures. Frit manufacture favours their stabilisation by firing all of the components at low temperature in an oxidizing atmosphere, until a coloured bisque is obtained. Frit can then be directly worked or can serve in turn as a pigment for the fabrication of other small objects whose fabric is then coloured throughout (Caubet and Pierrat-Bonnefois 2005: 13).

Glass

Glass is an artificial material whose amorphous structure, that is to say, non-crystalline, is relatively transparent and translucent. Like all vitreous materials, it consists of very accessible ingredients, mainly sand or crushed quartz pebbles that provide the necessary amounts of silica. In order to lower their melting temperature (1713°C) and to facilitate the shaping of the objects, a flux, soda or potash, and a lime stabilizer are added. Metal oxides may be added to the mixture to colour the paste, and adding opacifying agents can make it opaque. All these ingredients are brought to melting point at a temperature of about 1200°C. Thus, raw material blocks, glass ingots, are obtained and these can then be reworked by heating again. Because of its structure, glass, like metal and unlike faience, is in fact recyclable: ingots and broken fragments can be passed again through the oven and melted for new uses (Caubet and Pierrat-Bonnefois 2005: 14).

One generally distinguishes between primary workshops that produce the raw glass ingots and the secondary or processing workshops that shape finished objects. But as will be discussed later, no glass workshop, primary or secondary, is yet attested with certainty in the Elamite world.

Glazed terracotta

While ceramic in the Near East dates back to the Neolithic, glazed terracotta appears only later. The invention of this latter technique, which is very different from painted pottery, is closely linked to the development of the vitreous materials industry. A clay body, usually a kind of marl, is covered with alkaline glaze (Caubet et al. 2007: 15). The firing in an oxidizing atmosphere at a temperature of about 1000°C enables the covering applied to the paste to vitrify. Glazed terracotta is used from the second half of the second millennium in Elam, as in Mesopotamia, to manufacture different categories of ceremonial furniture: architectural designs, ceremonial vessels, monumental sculpture and so on. It becomes increasingly popular during the first millennium until it permanently replaces faience in the Seleucid era.

A world on the margins of the principal innovations (3000–1500 BC)

Between 3000 and 1500 BC, while the production of faience rose and expanded in Egypt with the development of figurines, game boards and even architectural decoration (Caubet and Pierrat-Bonnefois 2005: 35), this specific material was reserved in the Near East for small luxury objects; mostly jewellery, glyptic and vessels. Further east, evidence is scarcer. The ancient site of Susa, located on the northwestern edge of the Khuzistan plain, halfway between the Mesopotamian plain and the southeastern Iranian plateau, has provided much of the

material that is discussed below.

Susa's long occupation sequence, from the first settlements at the end of the fifth millennium BC until the site was abandoned in the thirteenth century AD, makes it one of the best testimonies to the production of objects in vitreous materials, especially for the earliest periods. Because of its location, Susa lived throughout the ages in the rhythm of a complex dialectic between the ebb and flow of Mesopotamian influence and the assertion of its Elamite identity, autonomy and cultural uniqueness. In early times, Susa's discoveries are very modest, quite a distant echo of the technological development happening in the Near East. Even if a native craft existed at that time, most of the faïences are probably imports flowing from one region to another, reflecting the different swings of the balance between the Mesopotamian plain and the Elamite plateau.

The first faïence objects dated with certainty appeared in the end of the fourth millennium during the Late Uruk Period when contacts between Susiana and the Mesopotamian plain became closer, as evidenced by their similar material cultures. Two small faïence "eye idols", originally covered by a blue or green glaze, demonstrate these close links. These intriguing objects, with their bell-shaped body topped with two perforated circles belong to a typology widely attested in Mesopotamia and northern Syria during the Late Uruk Period. Whether they are to be considered as votive figurines or as spinning weights (Caubet et al. 2007: 102) is still under discussion. The two examples from Susa are certainly the only samples in faïence attested to-date, yet nothing allows us to consider them as local products.

Later on, around 3100 BCE, major changes occur at Susa. Western influence decreased significantly with the collapse of the Uruk Period civilisation, whereas links with the highlands of Southern Iran in the east became tighter. The Proto-Elamite culture (3100–2750 BC), with its specific art and writing, developed and spread from Fars towards Susa. At that time, faïence production increased slowly, being firstly used for glyptic, one of the main artistic achievement of the Proto-Elamites alongside sculpture. Faïence cylinder seals of both Mesopotamian and local origin then coexist in Susa. A series of so-called "popular" cylinder seals (Amiet 1972: 111) in faïence or baked steatite originated in Mesopotamia. Their rectilinear geometric decoration contrasts with more elaborate compositions, mainly of animal inspiration, and the sculptural quality of Proto-Elamite productions (Amiet 1988: 57). Another production of baked steatite cylinders whose production centers reside along the western edge of the Susiana increases in parallel (Amiet 1972: 143). Their stylistic treatment, with flat engraved figures and strong highlighted grooves, integrates them into the sphere of Proto-Elamite productions, diffused across both southeast Iran on the Iranian plateau and central Mesopotamia.

From the middle of the third millennium, Susa rejoined the Mesopotamian milieu, integrating into the network of small Sumerian city-states before being absorbed into the Akkadian empire.

Faience cylinders of Gutu tradition dating to the period of Akkadian domination have been discovered at Susa. These were often decorated with a horned master of animals, testifying to the presence of mountain people from the Iranian foothills in the plain of Susa (Amiet 1972: 195).

Susa took part in the broad network of long-distance exchange that characterized the second half of the third millennium. A faience vessel fragment found in the “vase à la cachette” (Harper et al. 1992: 109) reflects this integration. It belongs to a category of small vases often covered with a blue-green glaze, which reproduce in faience vessels made of fine ceramic, stone and metal. A burial on the tell of the Ville Royale dated to the second half of the third millennium has delivered a very similar carinated vase, as well as small faience cups in the shape of shells and a couchant goat figurine comparable to Akkadian figurines discovered in a tomb at Ashur dated to the same period (Caubet et al. 2007: 104; Amiet 1966: 234). While we do not know whether all of these objects are imported or locally produced, they intersect very clearly with contemporary Mesopotamian productions.

During the Middle Bronze Age, Egyptian and Levantine workshops once again prove their dynamism and multiply their innovations (Caubet and Pierrat-Bonnefois 2005: 35–43). The Egyptian Middle Kingdom established the golden age of faience figurines, among which small hippopotamuses are certainly the most celebrated. The techniques of fashioning testify to a perfectly mastered *savoir faire*, particularly in the area of glaze achieved by immersion, application or efflorescence. In Syria, as in Anatolia, faience remains a luxury and expensive material, often found in palatial settings, which have delivered traces of fabrication workshops.

At Susa, on the other hand, the technique remains in its infancy at the margins of this phenomenon, incomparable with the qualitative and quantitative threshold that would later be crossed by Elamite craftsmen in the second half of the second millennium.

Under the reigns of the Shimashki sovereigns and then the Sukkalmahs, who adopted the double title “king of Susa and Anshan”, artistic production experienced a significant renewal, particularly in the field of metallurgy and ceremonial vessels. Bitumen mastic products were also particularly prestigious. The development of metallurgy, which involves the mastering of viscous materials processed at high temperatures, such as that of the technique of annealing (Henderson 2013: 4), fostered without doubt a favourable framework for the experimentation and accumulation of know-how comparable to that required for vitreous materials. Yet the production of faience remained underdeveloped: only a few ornaments such as a grotesque head of Humbaba, a pendant bead of Babylonian tradition (Caubet et al. 2007: 104; Amiet 1966: 268) and rare fragments of figurines are to be mentioned. One is a small smiling head with inlays, which perhaps reflects a more Elamite inspiration, unless it is considered a local imitation of the removable heads of Central Asian statuary (Amiet 1966: 285).

The Middle Elamite period: the golden age of innovation

The middle of the second millennium marked a significant break: in the Elamite world and in the entire Near East, the vitreous materials industry experienced an incomparable technological leap with the diversification of faience production and above all with the appearance of new materials such as glass and glazed terracotta. In the Elamite kingdom, this technological effervescence can be observed mainly in the Susiana plain: in the fifteenth century at Haft Tepe (ancient Kabnak), the seat of the king Tepti-Ahar, but even more so a century later at Choga Zanbil and Susa, first under the leadership of Untash-Napirisha (ca. 1340–1300 BC) and then of the Shutrukid rulers during the twelfth century.

Located 40 km southeast of Susa, the holy city of Choga Zanbil, or Dur Untash-Napirisha, was the major achievement of the reign of Untash-Napirisha. Baptized in the name of its sponsor, it covered an area of almost 100 hectares and comprised a ziggurat, temples and a palace surrounded by a wall of over 4 km length. The intensive building activity (Potts 1999: 2012) sponsored by the fourth ruler of the Igihalkid dynasty provided a climate conducive to the development and improvement of know-how in the field of vitreous industry. Technological innovations became more and more numerous with the growth and development of the art of faience and glass, adapted particularly to architectural decoration: the introduction of polychrome glazes and the development of glazed terracotta. Leading a vast empire, Untash-Napirisha was able to mobilize significant cohorts of workers and artisans to complete the construction of Choga Zanbil. The extent of this labor mobilization is reflected in the breadth and variety of material remains uncovered. While the vitreous materials industry was very limited in previous eras in the Elamite world, its unprecedented expansion at this time raises many questions. The Middle Elamite kingdom adopted and adapted the innovations that had appeared in northern Mesopotamia, at Nuzi in the heart of the Mitannian kingdom, about two centuries earlier. Did the close links between the Igihalkid dynasty and the Kassite dynasty promote the transfer of *savoir faire* or the mobility of certain artisans? Due to the lack of sufficient archaeological and historical evidence, this question remains open.

Among the new materials, glass was widely employed at Choga Zanbil, both in architectural decor, with polychrome glass tubes enlivening door panels and circular appliques enhancing knobbed plaques, and in glyptics and small votive objects (anthropomorphic and zoomorphic figurines, maces). Whatever their function may have been, all testify to a mastery of shaping methods, whether casting or mounting on a clay core, or the technique of annealing to perfect finishings.

The invention of glass, whose components are the same as faience but brought to melting point, dates back to the third millennium in Egypt and the Near East (Caubet et al. 2007: 14). Its production was perfected at the end of the Middle Bronze Age, between 1650 and 1500, especially in the workshops of the Mitanni kingdom.

During the Bronze Age, glass circulated in the form of ingots produced in so-called primary workshops in Egypt or the Near East. The content of the wreck of Ulu Burun with its 350 kg of glass is one of the most compelling stories of the Mediterranean, but ingots discovered in Failaka equally illustrate their circulation in a more eastern network (Pulak 2008: 314). Even if the originality and quantity of the products of Choga Zanbil implies local production, the craftsmen probably worked from small blocks of imported raw material. The location of these processing plants is still uncertain, although Ghirshman (1966: 95) mentions the presence of workshops and kilns in the annexes of the west temple of Kiririsha which, according to him, were dedicated to the production of small votive objects like the manufacturing workshops associated with Mesopotamian temples.

Glazed terracotta is another of the major innovations of the Middle Elamite period, appearing once again under the leadership of Untash-Napirisha at Choga Zanbil. This material is attested in the field of architectural decoration, favoured for the production of knobbed plaques and the manufacture of remarkable monumental animal door guardians [[Figure 28.1](#)]. Hence, a bull covered with blue glaze was placed at one of the entrances to the ziggurat, on the steps of the northeast stairs (Ghirshman 1966: 57) [[Figure 28.1c](#)]. Housed in the Tehran National Museum, it bears an inscription of 16 lines indicating the name of its sponsor, Untash-Napirisha, and its dedication to Inshushinak. In this dedication Untash-Napirisha takes credit for being the first sovereign to have used this material (Potts 1999: 225–226). Measuring nearly 1.3 m in height and apparently modeled over a bronze core for support, this statue is indeed a true technical feat. Other remains of very damaged door guardian animals were also found at the various entrances to the ziggurat, among which were at least two griffins (Ghirshman 1966: 40) [[Figure 28.1b](#)]. In the twelfth century, the Shutrukids adopted this technique and near the temple of Inshushinak on the Susa acropolis placed a pair of imposing protective glazed terracotta lions [[Figure 28.1a](#)] whose dimensions once again reveal a great technical achievement (Amiet 1988: 106; Caubet and Pierrat Bonnefois 2005: 90).

The introduction of these new materials was immediately perceived as a major innovation, to the point that from the reign of Untash-Napirisha new Elamite terms appear to describe them. Glazed terracotta, for instance, was designated by the term *mushi*. Thereafter, the Shutrukid rulers (1190–1120) proclaimed the invention of a new architectural decoration technique implementing a highly siliceous paste called *u-pa-at ak-ti-in-ni-ma* or *upat aktiya* which, when formed into decorative brick, imitates stone, a particularly rare resource in the region. As testified in Egypt and Mesopotamia (Caubet and Pierrat-Bonnefois 2005: 29), the different techniques of glass materials were also granted a special status in the texts. The interpretation of the various terms, however, remains difficult because of insufficient written sources to illuminate the different recipes of the workshops.



[Figure 28.1 Monumental glazed terracotta sculpture: temple gate guardians: \[a\] Lion from Susa \(photograph courtesy RMN-Grand Palais, Musée du Louvre/Franck Raux\); \[b\] Griffin from Choga Zambil \(photograph J. Álvarez-Mon; Museum of Susa\); \[c\] Bull from Choga Zambil \(photograph J. Álvarez-Mon; National Museum of Iran\).](#)

The variety of architectural decoration: an Elamite originality

If the emergence of these new materials, glass and glazed terracotta, in the Elamite world is part of an international trend, their use in the field of architectural decoration is a local singularity, which continued until the end of the Neo-Elamite period and was inherited by the

Achaemenid empire.

As in Mesopotamian architecture, Elamite buildings were constructed of mud-bricks, the most prestigious ones being covered with a facing of baked brick. Since the construction of the first monumental buildings in Susa, namely, the high terrace erected on the Susa acropolis, different types of decoration had been employed for both exterior and interior walls in order to bring to life the sometimes-dull brick facings: whether clay nails coated with paint like those of Malyan in the Banesh period (Heim 1989: 100), or plaster coating engraved with geometric patterns, as in the halls of the “funerary temple” at Haft Tepe (Negahban 1991: 14). During the Middle Elamite era, first under the reign of Tepti-Ahar in the fifteenth century and then under the Igihalkid and Shutrukid dynasties, vitreous materials were used for the first time to animate the walls of prestigious buildings. Newly emergent forms of architectural decoration, sometimes inscribed, were remarkable for their diversity: antefixes or knobbed plaques, decorative nails, figurative protomes and siliceous bricks.

The knobbed or antefix plaques were made of clay or siliceous paste up to several centimeters in thickness. Square in shape, they were perforated at the center to insert a knob: a kind of nail whose sometimes moulded foot is topped by a decorated or inscribed circular head. This knob could be either removable or fixed to the plaque. These decorative plaques are amongst the most characteristic Elamite architectural decorations. The first knobbed plaques appeared in the fifteenth century in Haft Tepe (ancient Kabnak), the residence of Tepti-Ahar. They were perhaps inspired by Kassite precedents (Heim 1989: 168). While some are made in stone, the faience versions are an innovation that can be attributed to Elamite workshops (Amiet 1966: 337).

The sites of Susa and of Tell-i Malyan (ancient Anshan) in Fars, provided decorations of this type. But Choga Zanbil was definitely the site where their production experienced the greatest development. Numerous knobbed plaques were found stored in warehouses (rooms 26 and 28) of the ziggurat [[Figure 28.2](#)], and also in situ, dumped on the slopes of the ziggurat and the surrounding courts (Ghirshman 1966: 37), as well as close to the gates and monumental passages. The Ishnikarab and Kiririsha temples and the Hypogeum palace also delivered many samples.

At Susa, knobbed plaques attributed to the Shutrukid sovereigns are attested in the Inshushinak temple on the Acropolis and in a monumental tomb built nearby (Heim 1989: 39). Others were found scattered on the tells of the Apadana and the Ville Royale, either devoid of any documented context or reused in later structures. Elizabeth Carter’s excavations at Anshan in building EDD also brought forth knobbed plaques, but of much smaller proportions (Carter 1996: 45).



[Figure 28.2](#) Glazed knobbed plaques from Choga Zanbil. Plaques in situ in room 26 (photograph after Ghirshman 1966, vol. I, Pl. XVIII); Plaque inscribed with the name Untash-Napirisha (photograph J. Álvarez-Mon; National Museum of Iran).

The iconographic repertoire shows great variety: at Choga Zanbil certain plaques, composites, are enriched with circular encrustations of glass; others are molded and decorated (quarters of rosettes placed in the corners) [[Figure 28.2](#)]. When they are inscribed, the knobbed plaques mention the name of the royal sponsor and that of the recipient deity, usually Ishnikarab (Heim 1989: 169). Covering both Middle and Neo-Elamite periods (not always distinguishable from one another), Susa has delivered the largest repertoire: motifs with

geometric designs (networks of lozenges); vegetal decorations of rosettes; zoomorphic designs (animals confronting each other in a heraldic attitude); or anthropomorphic designs (geniuses, sometimes dominating monsters or animals). Some among them offer an innovative iconographic repertoire, dancer or genius, sometimes attributed more to a palatial than cultic context (Amiet 1966: 400).

Some nails also seem to have been directly inserted into the masonry, without an adjoining plaque, as if to emphasize the directions of the lines of the buildings they decorated. Edith Porada (1970: 21) has suggested that some architectural decorations were echoed in contemporary glyptic.

In terms of architectural decoration, siliceous or glazed clay bricks equally constitute one of the fundamental innovations of the Middle Elamite period. Monochrome or colored, they appear first at Choga Zanbil during the reign of Untash-Napirisha. Monochrome bricks, generally covered with a blue or green glaze, underline certain architectural structures: they covered without doubt the high temple, the *kukunnum* dedicated to Napirisha and Inshushinak, which stood at the summit of the ziggurat (Potts 1999: 224). At this time, the first polychrome glazed bricks also appeared. Ornamented with friezes of black concentric circles on a white background or green diamonds on a blue background, they constituted the decoration of 11 offering tables arranged around the four courts of the ziggurat (Auberson 1966: 109–111).

In the following period, Shutrukid sovereigns took on board this innovation, and many monuments were adorned with brick facades with blue or green monochrome glazes. The Shutrukids, firstly Shilhak Inshushinak, were at the origin of an unprecedented technological development promising a great future: the manufacture of siliceous bricks in relief, arranged to form a historiated decoration. In the dynastic chapel or *suhter* on the acropolis, effigies representing the Shutrukid kings and queens colored in blue, green and yellow were incorporated into the masonry of mud-brick walls [Figure 28.3]. The monument was so spectacular that the foundation inscriptions of Shilhak Inshushinak specifically mentioned its colored bricks as a true achievement (Caubet and Pierrat Bonnefois 2005: 90–94).

Small objects, expressions of an international taste or Elamite identity?

From the Middle Elamite period, faience was widely used for small votive or funerary objects. Alongside examples of stone and glass, the storerooms of the ziggurat at Choga Zanbil delivered a profusion of votive maces, while chapels III and IV situated inside its enclosure wall contained numerous small animal figurines and seals of faience.



[Figure 28.3 Monumental facade of moulded glazed bricks from Susa representing a royal couple, possibly Shilhak-Inshushinak and his queen \(1150–1120 BC\) \(photographs J. Álvarez-Mon; Musée du Louvre\).](#)

As Agnes Spycket emphasized, the production of these faience figurines at Choga Zanbil can once again be attributed to Untash Napirisha. In addition to the small animals (wild boar, monkeys, etc.) from the chapels of the ziggurat, the temple of Pinikir delivered examples of female figurines in faience, more or less fragmentary, that reproduced the attitude of queen Napirasu in her monumental statue (Spycket 1992: 217). The Middle Elamite period witnessed a fundamental shift in the production of the Susian coroplasts, with the appearance of naked women supporting their breasts, lutists and elegant maternal figures. The production of

figurines in faience was instead limited to the representation of worshipers in an attitude and costume similar to those of small contemporary metal figurines. Some productions, like a series of masks in frit, on the other hand, were linked with international productions attested throughout the Near East.

The manufacture of faience cylinder seals was perpetuated in the Middle Elamite period. They were found at Haft Tepe as well as Chogha Zanbil and Susa. Even if the seals from Haft Tepe, found scattered throughout the tell (Negahban 1991: 49), were linked to the traditions of the first half of the second millennium (Amiet 1996: 142), glass and faience cylinder seals from Choga Zanbil indicate a revival of Elamite production. Probably deposited as offerings in the chapels III and IV of the southwest precincts of the ziggurat, they were in line with a fairly basic decoration dominated by scenes of cult with pseudo-inscriptions and mythological scenes (Amiet 1966: 339). The banquet scenes found on Middle Elamite Susian faience cylinders probably derived from Kassite glyptic (Harper et al. 1992: 211).

Faience vessels, whose forms diversified from the Middle Elamite era, fit within the flow of international trade and a shared taste for this luxury production. They include vessels decorated with female faces and banquets, spouted beakers and pyxides. The latter are more varied than those produced by the workshops of the Levant and Mesopotamia. They can be square or cylindrical shaped with walls bearing engraved or molded decorations, often animated by zoomorphic and anthropomorphic motifs. Unlike the rest of the Near East their production remains strong in the first millennium, but due to lack of sufficient archaeological documentation they are sometimes difficult to date.

Continuity of the industry of vitreous materials in the Neo-Elamite period

The late twelfth century saw the disappearance of the Shutrukid dynasty after Nebuchadnezzar I (1126–1105) defeated Hutelutush-Inshushinak. Elamite history in the following centuries is unclear. Between the eleventh century and the second half of the eighth century royal inscriptions and other written documents are unknown, a situation which according to Pierre de Miroschedji (1990: 76–77) results from the dislocation of the centralized political organization of the Shutrukids.

Nevertheless, during the first millennium, Elam witnessed a phenomenon of continuity in the manufacture of objects in vitreous materials, whereas production declined in Mesopotamia at the same time. Susa delivers the best evidence, even if it is sometimes difficult to propose a precise chronological sequence due to a lack of sufficiently documented archaeological contexts. Architectural decorations, figurines and luxury tableware are perpetuated, and sovereigns like Shutruk Nahhunte II (716–699) claimed the heritage of their Middle Elamite predecessors (Caubet and Pierrat Bonnefois 2005: 108). On the whole, the discoveries indicate a transmission of know-how within the Elamite workshops and at the same time a clear

dynamism, since certain new innovations come to light.

The increasingly well-mastered technique of polychromy through the application of glazes of different colors epitomizes advances in the domain of faience production in the Neo-Elamite era. Their juxtaposition is favored by the invention in the ninth century BC of a system of partitions drawn in a brown or black glaze tinted with iron oxide or manganese with high siliceous concentration and low alkaline presence (Holakooei 2014: 780). Their refractory qualities help prevent glazes of different colors from mixing during the firing process. The use of this “cloisonné” technique is attested in architectural decoration, in which the artisans perpetuate the production of decorative plaques, knobs, historiated brick friezes without relief, as well as in ceremonial vessels and figurines. Soft colors are preferred: light blue, yellow, white and green make up the bulk of the Neo-Elamite palette.

Linked to economic and political conditions, Susian achievements of this period are not in the domain of monumental undertakings. In the southeast part of the Susa acropolis, Shutruk Nakhunte II built a small square temple with a simple plan that brings it closer to Urartian buildings of the same era. It differs, however, in its rich polychrome decoration of plaques fixed to the walls by nails with animal protome terminals. The temple walls were made of bricks glazed with green both inside and out. Nearby, bricks of siliceous paste were discovered constituting what Amiet considered as an “enameled table” made of several layers of brick like the Middle Elamite podiums at Choga Zanbil: “It is not impossible that the podium leaning against the back wall, of which only the base was discovered, was built in historiated brick, decorated on the sides with horses, lionesses, griffins and winged scorpions, while on the horizontal portion of the table, griffins face each other in a stylized plant network” (Amiet 1967: 27). These bricks were inserted, in any case, in the heart of an ensemble where the faience architectural decoration took pride of place, since fragments of knobs, large square plaques carved in low relief and fragments of historiated squares, some in relief, were also found.

Likewise, fragments of anthropomorphic and zoomorphic figurines discovered in the temple attest to the continuity of this production during the Neo-Elamite period [Figure 28.4]. At Susa about 30 human faience figurines (Martinez-Sève 2002: 56–57) representing deities or worshipers in prayer were found [Figure 28.4a]. They are very similar to statuettes attested in neighboring Luristan at Surkh Dum and Chigha Sabz. The zoomorphic figurines [Figure 28.4b–c] are often without documented archaeological context and are much more difficult to date, but their production seems to be upheld almost without discontinuity between the Middle Elamite and Neo-Elamite periods.

In the field of vessels, a climate of technological competition saw the production of small vases in siliceous paste in similar forms to those made in terracotta covered with glaze. During the Achaemenid period, this latter technique spread and would eventually completely replace the production of faience during the Seleuco-Parthian period (Caubet and Pierrat-Bonnefois

2005: 113). Neo-Elamite vases in faience or terracotta usually exhibit a narrow neck and molded belly. They are sometimes enhanced with a decoration of colored chevrons or dotted circles. Those with globular body and pointed base mimic a luxury vessel in metal, while, according to their decoration, others may have imitated small Mesopotamian glass vessels circulating in the Elamite world. Found mostly in funerary contexts, faience and glazed terracotta vessels were probably intended to contain ointments and perfumes, or even, as suggested by Heim (1992: 203), liquids for quenching the thirst of the deceased in the afterlife.



Figure 28.4 Neo-Elamite faience statuettes from Susa. [a] Male worshiper (photograph courtesy RMN-Grand Palais, Musée du Louvre/Hervé Lewandowski); [b, c] Horse and bull knobs (photographs J. Álvarez-Mon; Musée du Louvre).

Conclusion

Despite the turbulent history of the Elamite kingdom in the first half of the first millennium BC, production of objects in glass materials, mainly faïence and glazed terracotta, continued. This astonishing permanence, which contrasts with the gradual abandonment of these materials in Mesopotamia, attests to the maintenance of specialized workshops and the transmission of know-how between the Middle-Elamite and Neo-Elamite periods. Nevertheless, the political situation did not allow for the production of decoration on a monumental scale, which requires the mobilization of substantial cohorts of craftsmen. The sack of Susa by Assyrian troops in the year 646 destabilized the Neo-Elamite kingdom, yet the Elamite culture did not completely disappear. It seems that the principalities, including Susiana, reformed timidly during the sixth century, before being integrated into the Persian empire. In the field of vitreous industry, the Elamite knowledge did not disappear. The ambitious program of siliceous decorative glazed bricks that animated the walls of the palace of Darius at Susa is indeed the direct heir of *savoir faire* developed during the previous millennium.

Notes

* — Translated from French by Javier Álvarez-Mon and Yasmina Wicks.

Bibliography

- Amiet, P. 1966. *Elam*. Auvers sur Oise: Archée.
- Amiet, P. 1967. Éléments émaillés du décor architectural néo-élamite. *Syria* 44: 27–46.
- Amiet, P. 1972. *Glyptique susienne*. Mémoires de la Délégation Archéologique en Iran XLIII. Paris: Geuthner.
- Amiet, P. 1988. *Suse, six mille ans d'histoire*. Paris: RMN.
- Amiet, P. 1996. Observation sur les sceaux de Haft Tépé. *Revue d'Assyriologie et d'Archéologie Orientale* 90: 135–143.
- Auberson, P. 1966. Tables d'offrandes en briques émaillées. In: Ghirshman (ed.) *Tchoga Zanbil, vol. I. la Ziggurat*, Mémoires de la Délégation Archéologique en Iran XXXIX. Paris: Geuthner, 109–111.
- Bouquillon, A. and Barthelemy De Saizieu, B. 2000. Émergence et évolution des matériaux vitrifiés dans la région de l'Indus du 5ème au 3ème millénaire (Merhgarh-Nausharo). *Paléorient* 26: 93–112.
- Caubet, A., Bouquillon A., Kaczmarczyk A. and Matošian, V. 2007. *Faïences et matières vitreuses dans l'Orient Ancien dans les collections du musée du Louvre*. Paris: Snoeck.
- Caubet, A. and Pierrat Bonnefois, G. 2005. *Faïences. Faïences de l'Antiquité. De l'Égypte à l'Iran*. Paris: Musée du Louvre Editions.
- Carter, E. 1996. *Excavations at Anshan (Tal-e Malyan): the Middle Elamite Period*. Philadelphia: The University Museum of

Archaeology and of Anthropology of Pennsylvania.

- Ghirshman, R. 1966. *Tchoga Zanbil, vol. I. la Ziggurat*. Mémoires de la Délégation Archéologique en Iran XXXIX. Paris: Geuthner.
- Harper, P.O., Aruz, J. and Tallon, F. 1992. *The Royal City of Susa*. New York: The Metropolitan Museum.
- Heim, S. 1989. *Glazed Architectural Elements from Elam and Related Materials from Luristan* (PhD). Ann Arbor, Michigan: Institute of Fine Arts, New York University (UMI Dissertation Service).
- Heim, S. 1992. Glazed Objects and the Elamite Glaze Industry. In: Aruz, Harper and Caubet (eds.) *The Royal City of Susa. Ancient Near Eastern Treasures in the Louvre*. New York: Metropolitan Museum, 202–210.
- Henderson, J. 2013. *Ancient Glass*. Cambridge: Cambridge University Press.
- Holakoei, P. 2014. A Technological Study of the Elamite Polychrome Glazed Bricks at Susa, South-Western Iran. *Archaeometry* 56: 764–783.
- Martinez-Sève, L. 2002. *Les figurines de Suse, de l'époque néo-élamite à l'époque sassanide*. Paris: Réunion des Musées Nationaux.
- Miroschedji, P. de. 1990. La fin de l'Elam: essai d'analyse et d'interprétation. *Iranica Antiqua* XXV: 47–95.
- Moorey, P.R.S. 1994. *Ancient Mesopotamian Materials and Industries: The Archaeological Evidence*. Oxford: Clarendon Press.
- Negahban, E.O. 1991. *Excavations at Haft Tepe, Iran*. Philadelphia: The University Museum of Archaeology and Anthropology.
- Porada, E. 1970. *Tchoga Zanbil* (Vol. IV) La Glyptique. In: Ghirshman, R. (ed.) *Mémoires de la Délégation archéologique en Iran*, Vol. XLII. Paris: Geuthner.
- Potts, D.T. 1999. *Archeology of Elam*, Cambridge: Cambridge University Press.
- Pulak, C. 2008. The Uluburun Shipwreck and Late Bronze Age Trade. In: Aruz J., Benzel K. and Evans, J.M. (eds.) *Beyond Babylon*. New York: The Metropolitan Museum of Art.
- Spycket A. 1992. *Les figurines de Suse. I. Les figurines humaines IVe-IIe millénaire*. Mémoires de la Délégation Archéologique en Iran LII. Paris: Gabalda.

CHAPTER TWENTY-NINE

Origins of monumental sculpture in Elam

Two case studies



Holly Pittman

Excavations on the Acropole of Susa by the French in the early decades of the twentieth century produced many remarkable works of sculpture through which its development can be reconstructed over three millennia. However, because the techniques of stratigraphic excavation were neither fully understood nor consistently practiced at the time, these works of art can only rarely be considered within a secure archaeological context. Rather, iconography, style and technical features are fundamental to our assessment of date and cultural identity. In some instances, later work using unpublished excavation records held in the Louvre has been able to establish greater contextual control (Amiet 1976a), but for the most part these objects must in any case be considered without contextual support. The most fundamental task of such considerations is assignment of date. The cultural attribution assigned to works by the early excavators has frequently been maintained in later scholarship, although details of style and iconography do not in all cases support a reconsideration (e.g. Pittman 2003). Without a secure understanding of the date of individual works of art, it is not possible to construct an accurate art history for the Elamites. This chapter will consider two distinct groups of sculpture from the second half of the third millennium BCE, re-evaluating the currently held assignments of date and offering new insights into historical and cultural processes.

The first discussion will focus on an inscribed sculpture of an individual named Eshpum, one of a group of sculptures belonging to the third quarter of the third millennium. The second discussion will scrutinize one of the sculptural objects in the extraordinary collection associated with the ruler Puzur Inshushinak, a contemporary of the Mesopotamian rulers Gudea and Urnamma at the end of the third millennium. Each of these case studies considers questions of iconography and style in the context of the unique relationship that Susa had with its western neighbors in southern Mesopotamia. Its proximity just to the east of Mesopotamia, reachable by boat and overland from the earliest periods, but also standing as the gateway and

one of the cultural centers of the highland Elamite culture, had a profound effect on the arts of Elam as known from Susa beginning in the fourth millennium, long before such a political entity even existed (Amiet 1979). Even when Susa was under direct hegemonic domination of Mesopotamia, as it frequently was, Elamite artists maintained both their own styles and emphasis in iconography. In the art historical literature, Elamite works are often characterized as “archaizing” or “peripheral” with relation to Mesopotamia, suggesting that they were solely derivative and never intentional. This discussion will replace that interpretative approach with one that seeks to define distinctly Elamite features of these works and what those features can tell us about Elam. In addition, in each of these considerations, the relationship between written text and visual image plays an important role in our interpretation of the objects within the larger body of Elamite sculpture. In particular, questions of recutting are raised in each of these case studies.

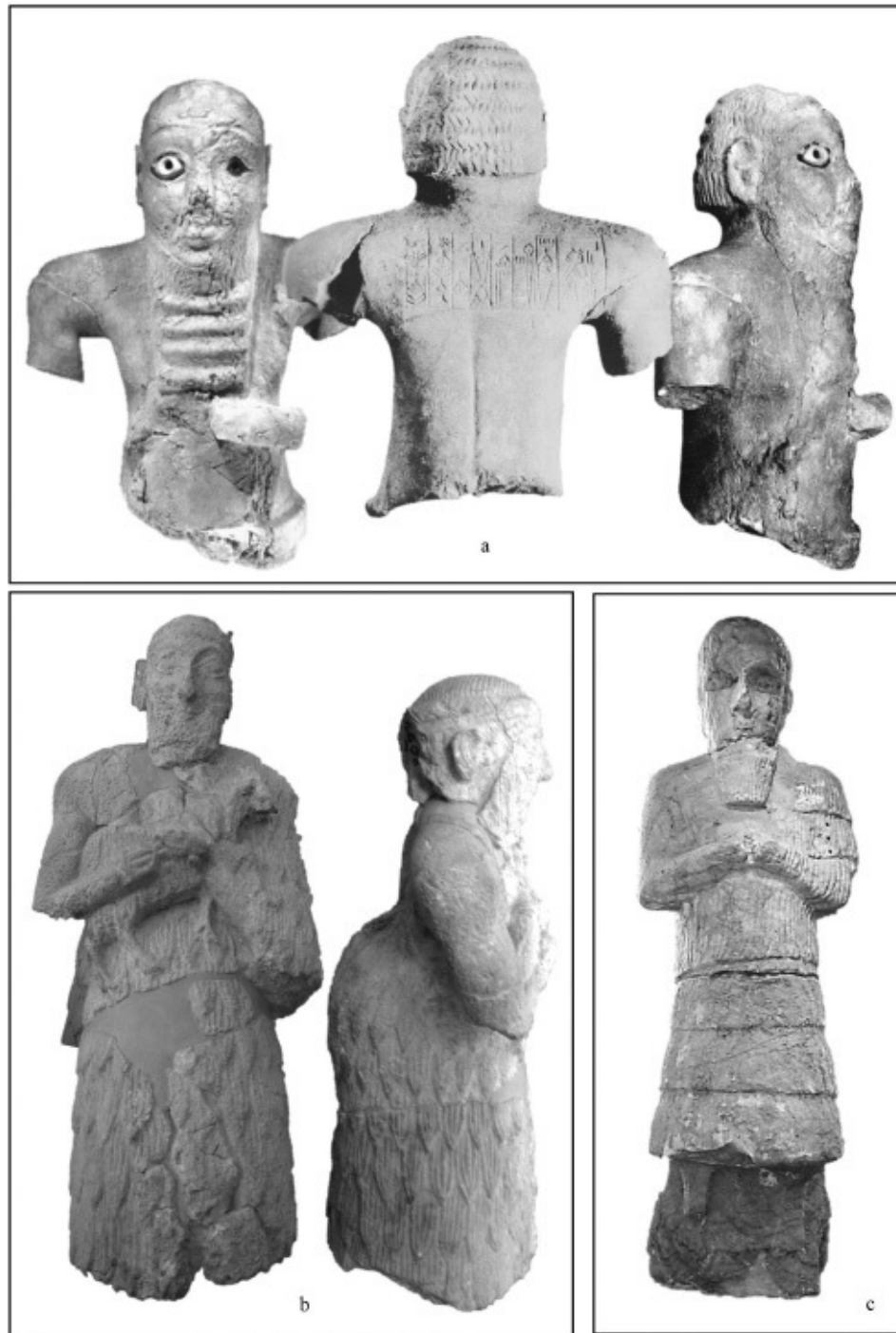
The “amas de Manishushu”

The subject of this first case study, the sculpture of Eshpum, belongs to the earlier body of material retrieved from a context that Pierre Amiet (1976a) has carefully reconstructed from the unpublished notes of its excavator, Roland de Mecquenem. This is a disparate collection of objects apparently associated with a temple of Narundi, an early Elamite goddess who Shulgi named Ninhursag of Susa. As a group, the cluster of objects was referred to by the excavator as the “amas de Manishtushu” on the basis of associated inscriptions invoking the name of the Old Akkadian ruler. As Amiet reconstructed it, the “amas” or group of objects consisted of 33 fragmentary works of sculpture, as well as works in bitumen mastic and an “archive” of seals and seal impressions as well as cuneiform tablets of Old Akkadian date. Although found in close proximity, the objects in this deposit are certainly not of one date. The earliest can be associated on the basis of form and style with the middle of the Early Dynastic period in Mesopotamia around 2600 BCE, while the latest certainly belong to the Old Akkadian period. This collection of earlier and later works within a sacred context is not unusual. Even under the best of controlled archaeological circumstances, the dating of individual works in similar depositional contexts can only be accomplished through stylistic and iconographic analysis because they were deposited together at some *terminus ante quem* which in this case would have been sometime in the Old Akkadian period after the reign of Manishtushu.

While most of the pieces of sculpture can be evaluated solely on the basis of their formal attributes, one sculpture carries an inscription that gives independent evidence for its date. It is a fragmentary three-dimensional image of a male figure ([Figure 29.1a](#)) which preserves his upper body from the waist. Across the figure’s back is an inscription in Akkadian which states:

Ma-an-ish-tu-shu

LUGAL
KIS
Esh-pum
IR-su
a-na
d Na-ru-ti
A MU.NA.RU
Manishtushu,
king of Kish,
Eshpum,
his servant
to Narundi
donated



[Figure 29.1 \[a\] Male statue. Inscribed. Eshpum \(Louvre Museum Sb 82; Height 30 cm, width 22 cm; Grey alabaster\); \[b\] Male statue holding goat \(Louvre Museum Sb 84; Height 42, width 18 cm. Alabaster\); \[c\] Statue without goat \(Louvre Museum Sb 83; Height 50 cm; width 15 cm. Alabaster\) \(photographs courtesy J. Álvarez-Mon\).](#)

Many scholars who have discussed this sculpture in print (e.g. Amiet 1966; 1976a; 1976b; Bahrani 1992: 53; Spycket 1981: 73, no. 149; Eppihimer 2009; Álvarez-Mon, Chapter 30 in this volume) have accepted the evaluation offered first by Eva Strommenger (1959) who concluded on the basis of style that in spite of the inscription, this work could not be Old Akkadian in date. In her opinion, the work shares too many features of abstraction and

stylization with Early Dynastic sculpture, while at the same time lacking any hints of the idealized naturalism so powerful in the royal images of Manishtushu. In her mind, the only explanation for this formal discrepancy was that it had to be an earlier work which Eshpum appropriated after he was appointed an official in the Akkadian court of Manishtushu in Susa. He would have had it recut and inscribed in preparation for its dedication to the goddess in her temple. Even following his careful consideration of the archaeological context in which this sculpture was found, Amiet continued to support this interpretation that on the basis of the style of the object, it had to be an earlier work that received a later inscription. Underlying this conclusion is the assumption that the official sculpture of Susa must have followed essentially identical patterns of development familiar to us from the more abundant evidence from Mesopotamia. They would be differentiated only by their peripheral or archaizing appearance. For the Early Dynastic period, the numerous sculptures from the temples in the Diyala valley serve to exemplify the stylistic development that must stand as the point of reference (Frankfort 1943; Evans 2012).

Over the past three decades or so, it has become increasingly clear that the transition between Early Dynastic and Old Akkadian periods in Mesopotamian political history cannot be precisely mapped directly onto a parallel evolution in contemporary material culture. For example, the ceramic traditions retain many features of the earlier phase into the later decades of the Akkadian period (Gibson and McMahon 1995). Distinguishing late Early Dynastic from early Old Akkadian in glyptic art is also often problematic (Matthews 1997). The most common hypothesis offered to explain the Early Dynastic features in Old Akkadian works is still the role of “archaizing” or the work of “old fashioned” craftsmen. Such explanations ignore the very real processes that underlie evolution in style and iconography and miss an opportunity to define more precisely the range of artistic expression that was practiced at any one moment. Because the Eshpum sculpture carries an inscription that associates it with a known Mesopotamian ruler, the work offers an opportunity to focus closely on the nature of Elamite art during the middle years of the Old Akkadian period, at a moment when the dynastic style associated with the Old Akkadian rulers becomes canonized.

There is no question that the image of Eshpum is stylistically different than the images that we associate with his master, the Old Akkadian ruler Manishtushu (Eppihimer 2010). All aspects of his image are more schematic and abstract in keeping with stylistic norms of the Early Dynastic images. Significantly, however, the image of Eshpum also displays numerous stylistic features that are never seen in Early Dynastic sculptures. There are, of course, two variables operating here. As stated above, the majority of relevant Early Dynastic sculpture was produced in Mesopotamia, therefore in a consideration of Eshpum, one must allow for the existence of an Elamite style in contemporary sculpture of any period. Further, there is no question that some of the sculpture found in the “amas” is certainly Early Dynastic in date. Many of these examples are essentially indistinguishable from sculpture found in the temples

in the Diyala river valley.

Among the differences the Eshpum's image has with Early Dynastic sculpture, the most prominent is his full head of hair which is worn in a short-cropped style without a central part. Male images with hair from the Early Dynastic period all show the hair parted in the middle, and invariably the hair is long and pulled over the shoulders to lie on the pectorals. On occasion, a third bunch of hair falls down the back. Strommenger (1959) and Amiet (1976b) both argue that the original hair style of the sculpture was originally of that type and that the hair was recut when the sculpture was repurposed by Eshpum. Such a radical refashioning of hair style could not have been accomplished without leaving trace indications either on the surface of the stone, or in its form. For one, the entire body of hair would have to have been recut to obliterate traces of the deep central part, and that would affect the shape of the head. Further, both the shoulders and pectorals would have been covered with hair which would also have had to be removed. Upon examination, there is nothing on the surface or the shape of the affected parts of the sculpture that indicates it had been recut before receiving its inscription which clearly and unequivocally dates the work to the reign of Manishtushu.

But how, then, do we account for the discrepancy in style between the image of Eshpum and what do we expect to be the court production of official sculpture during the middle of the Old Akkadian period? Must we simply understand this work as "archaizing", implying an unconscious retention of earlier models (Braun-Holzinger 1991), or can it be understood as typical of Elamite artistic production at this moment, a stylistic choice that was intentional and indeed perhaps understood as innovative in one way or another? This is to say that there does not have to be anything "archaizing" or "old fashioned" or "incompetent" in the production of this work, but rather it can be understood as a stylistic expression that was different from the court style of Mesopotamia during the middle of the Old Akkadian period. We should understand it as an Elamite sculpture typical of the middle of the Old Akkadian period, intentionally distinguishing itself from the court style that was emerging around the Old Akkadian royalty.

There is now evidence to support this line of argument coming from the recent archaeological discoveries at the site of Abu Sheeja, in Iraq. Abu Sheeja is an 18-hectare site in central Babylonia close to the Iranian border, approximately 100 kms due west from Susa. Iraqi archaeologists report (Hussein et al. 2010) the discovery of a temple dedicated to the god Shuda. Found installed in the temple was a carved and inscribed stele which tells us (Hussein et al. 2010: 57–58):

"For (the god) Shuda, Ilshu rabi (of) Pashime, the solider, brought in this statue. May the one who erases the name (on this inscription) not find an heir; may he not acquire a name (for himself)."

This inscription is significant for a number of reasons, the most important being that it allows the site to be identified as Pashime, a territory known from later inscriptions to be part

of the territorial holdings of the kingdom of Kindattu, ruler of Elam and Anshan (Van Dijk 1978: 193–194 ll. 22–23). Before this discovery, Pashime was thought to lie on the ancient coastline of the Persian Gulf, perhaps in the vicinity of the modern port town of Bushire. As Steinkeller (1982) observed, in ancient times the head of the Gulf extended much farther north than it does today, and while Pashime may have controlled part of its shore, it seems unlikely that it held territory all the way to Bushire. Joining Anshan, we can now be confident of another point in the historical geography of the Bronze Age Iranian world. While the grammar, paleography and orthography of the Abu Sheeja inscription dates it generally to the Sargonic period, Ilshu rabi can be dated precisely to the reign of Manishtushu because he is identified as the governor of Pashime on the Manishtushu Obelisk (Hussein et al. 2010).

In addition to the inscription, the stele also carries an image of the governor, which is relevant to our evaluation of the Eshpum image. When the two are directly compared, a virtually one-to-one similarity is immediately apparent. Ilshu rabi is, in fact, a two-dimensional rendering of the three-dimensional Eshpum. The similarity includes the hair cut with the sharp ledge at the nape of the neck, the long beard that is shaved almost to the angle of the chin, the prominent eye socket, the large ear, the position of the hands directly beneath the beard, the tubular shape of the upper arms, the belt at the waist, and the nude torso. Because Ilshu rabi mentions the image in the inscription, there can be no question that the stele is earlier and the inscription added. Such close similarities shared among these images demands that we consider them as contemporary. Given their findspots, it is most likely that they were made in different workshops. If so, their shared features can be thought of as appropriate for the image of a certain high level of Elamite official working within the Old Akkadian hegemon. Rather than understanding the style of these two official works as backward looking (M. Gibson in Hussein et al. 2010: 56, fn. 13; Evans 2012), it is my view that the style of Eshpum and Ilshu Rabi should be considered as entirely consistent with accepted sculptural norms of the early Old Akkadian period. Indeed it is conceivable that the court style developed under Rimush and Manishtushu was forbidden for use by dependent officials and that the sculptors working for them developed their own distinctive visual language.

Although without inscriptions and therefore more difficult to associate with the old Akkadian period, it is possible that several other sculptures found in the “amas” of Manishutushu can be assigned to the Old Akkadian period. Included are two sculptures of male figures wearing flounced garments and carrying young sheep as offerings ([Figure 29.1b, c](#)). Both of these works are also commonly assigned to the Early Dynastic period.

It is important to remember that much of the Old Akkadian royal sculpture found at Susa was taken there as booty almost a millennium after the site was dominated by the Old Akkadian kings (Harper and Amiet 1992). However, Melissa Eppihimer (2009) has suggested that some of the Old Akkadian sculpture found at the site may in fact have been erected during the Old Akkadian period. If so, there would have been Mesopotamian models available

for local sculptors and officials to have considered in developing their official style. Clearly they did not choose to emulate them. In any case, it is unlikely that the official royal sculpture of the Old Akkadian rulers was actually made at Susa. The one royal sculpture that we can be certain was at Susa in the third millennium is the seated figure inscribed by Puzur Inshushinak (Amiet 1976b: Figure 35a-c). Some have argued that this work was appropriated by the later Elamite king, while others argue that detailed differences suggest that it was carved at Susa during his reign (Eppihimer 2009), intentionally drawing on Old Akkadian royal models. The discussion that follows tackles other aspects of the complicated visual program of that important Elamite ruler.

The “Galet” of Puzur Inshushinak

The second case study tackles a similarly knotty problem in Elamite sculpture, engaging with the sculptural works associated with Puzur Inshushinak, identified on the King List of Awan and Shimashki as the last king of the Dynasty of Awan. Although we have extensive artefactual as well as textual evidence for this Elamite king, his place in the history of Elam and Mesopotamia is still a matter of considerable debate and uncertainty (Sallaberger 2015; Steinkeller 2013).

While we are sure that Puzur Inshushinak claimed three distinct titles in his *cursus honorum* (governor of Susa, shakkanshum of the land of Elam, son of Shimpi’ ishhuk and finally the mighty king of Awan, son of Shimpi’ ishhuk), the land of his origin is still unclear. Some have argued that he was an Elamite king who seized control of Susa (Glassner 1988). Others suggest that he derived from Anshan (Steinkeller 2013), others assume that he was from Susa and rose locally in the ranks (Lambert 1991). Regardless of his origins, it is clear that Puzur Inshushinak took advantage of the power vacuum created by the collapse of the Old Akkadian state to capture control of vital routes linking the plateau and the alluvium. At the height of his power, he tells us that he controlled lands in western Iran. Inscriptions of Ur Namma report that Puzur Inshushinak also controlled cities in the Diyala as well as the city of Agade. Finally, it is certain that Puzur Inshushinak was defeated early in the reign of Ur Namma, who then consolidated his control over these regions.

What is less certain is the relative place, both chronologically and historically, of Puzur Inshushinak in relation to the Mesopotamian rulers Gudea and Ur Namma. Steinkeller’s (1988) proposal to see Gudea and Ur Namma as contemporaries has recently been challenged (Sallaberger 2004), allowing a return to an historical sequence that places Gudea’s reign earlier than that of Ur Namma. In this reconstruction, these Mesopotamian rulers overlap only briefly at the end of Gudea’s and the beginning of Ur Namma’s reign. The result of this redating allows Gudea to be understood as an independent actor in his relations with the East. This reordering of reigns through textual analysis has relevance for our understanding of relations

between Susa and Mesopotamia, and it has further ramifications for our understanding of the monuments of Puzur Inshushinak found at Susa.

At Susa, Puzur Inshushinak is well documented through more than 20 inscriptions carried on objects as well as on tablets and other clay items (Amiet 1976b; Hinz 1969; André-Salvini 2006–2008). In the early excavations on the Acropolis at Susa, 12 works of sculpture were found in various locations that can be associated through inscriptions with his reign (Amiet 1976b). Some of the works carry an inscription in Akkadian, while others carry only still undeciphered Linear Elamite inscriptions. Three of them carry texts in both scripts, usually interpreted as bi-linguals. Because the Linear Elamite script is not deciphered, and we are not even positive that the underlying language is Elamite, the relationship between the inscriptions is still unproven. In addition to human and divine images, which are discussed by Álvarez-Mon in Chapter 30 of this volume, two sculptures of lions are known (Amiet 1976b: Figure 59, 60), neither of which is inscribed. Further, there is a stone slab carved with the head of a lion (Amiet 1976b: Figure 61) that carries both Akkadian and Linear Elamite inscriptions. Finally, there are two large “galets” (boulders) which carry both imagery and inscriptions and have large holes in which a mast or pole could have been set. It is these monuments which are the focus of the discussion here. The most recent substantive treatment of the Puzur Inshushinak monuments was undertaken by Beatrice Andre-Salvini and Mario Salvini (1989), and this consideration builds on their contribution.

Similar to the discussion of Eshpum above, there is a question of the contemporaneity of the inscriptions and the imagery on these monuments. However, in this instance an opposite conclusion is reached. It will be argued here that at least the most elaborate of the galets ([Figure 29.2a-e](#)) was subjected to recutting which has, until now, gone unobserved and unconsidered. Incorporating this recutting into an interpretation of the monument allows us to understand more clearly both the monument itself and its historical context.

In their restudy, André-Salvini and Salvini (1989) present a new reconstruction of the galet based on a secure join they were able to establish between fragments Sb 6 and Sb 177, to which they also associated a third small piece Sb 18446. While still very fragmentary, this join gives a clearer understanding of the monument’s imagery, and it establishes that this object carried inscriptions in both ([Figure 29.2c, d](#)) Akkadian and in Linear Elamite. As it stands now, the ovoid boulder carries the image in high relief of a snake coiled on its top. Along the outer edge of the serpent is part of a three-line Linear Elamite inscription. On the proper right side of the boulder, the newly established join allows the reconstruction of the back part of the body of a recumbent lion having an open mouth and a raised large front paw ([Figure 29.2c](#)). Across the haunch and belly of the feline is a two column Akkadian inscription cursing anyone who would damage the monument. Unlike the Linear Elamite inscription which was carefully placed around the outline of the snake, the Akkadian inscription was carved without regard for the sculptural integrity of the image of the lion. Clearly this differing placement reflects

two fundamentally different attitudes toward the relationship between text and image on the monument.

The other image preserved on this galet is a vignette placed directly in front of the lion's gaping mouth showing a kneeling god holding a large foundation peg in front of a lama goddess. Two other hints of inscription are also present. Behind the lama goddess is the vertical line of a frame. André-Salvini and Salvini argue that this might have been the continuation of the Linear Elamite inscription. However, the narrow width of the line is more consistent with the frame surrounding the Akkadian inscription on the feline's body. Finally there is the corner of what may be another frame behind and above the head of the lion. Given the relationship of this frame to the snake's body, it is possible that this marked the continuation of the Linear Elamite inscription. Unfortunately, the other side of the ovoid block is entirely broken away. A second fragmentary galet (Sb 6733), certainly a pair with this one, was also found on the Acropole. On the remaining half of this monument, the only imagery is the coiled snake on the top similarly surrounded by a multiple-line Linear Elamite inscription ([Figure 29.3a, b](#)).

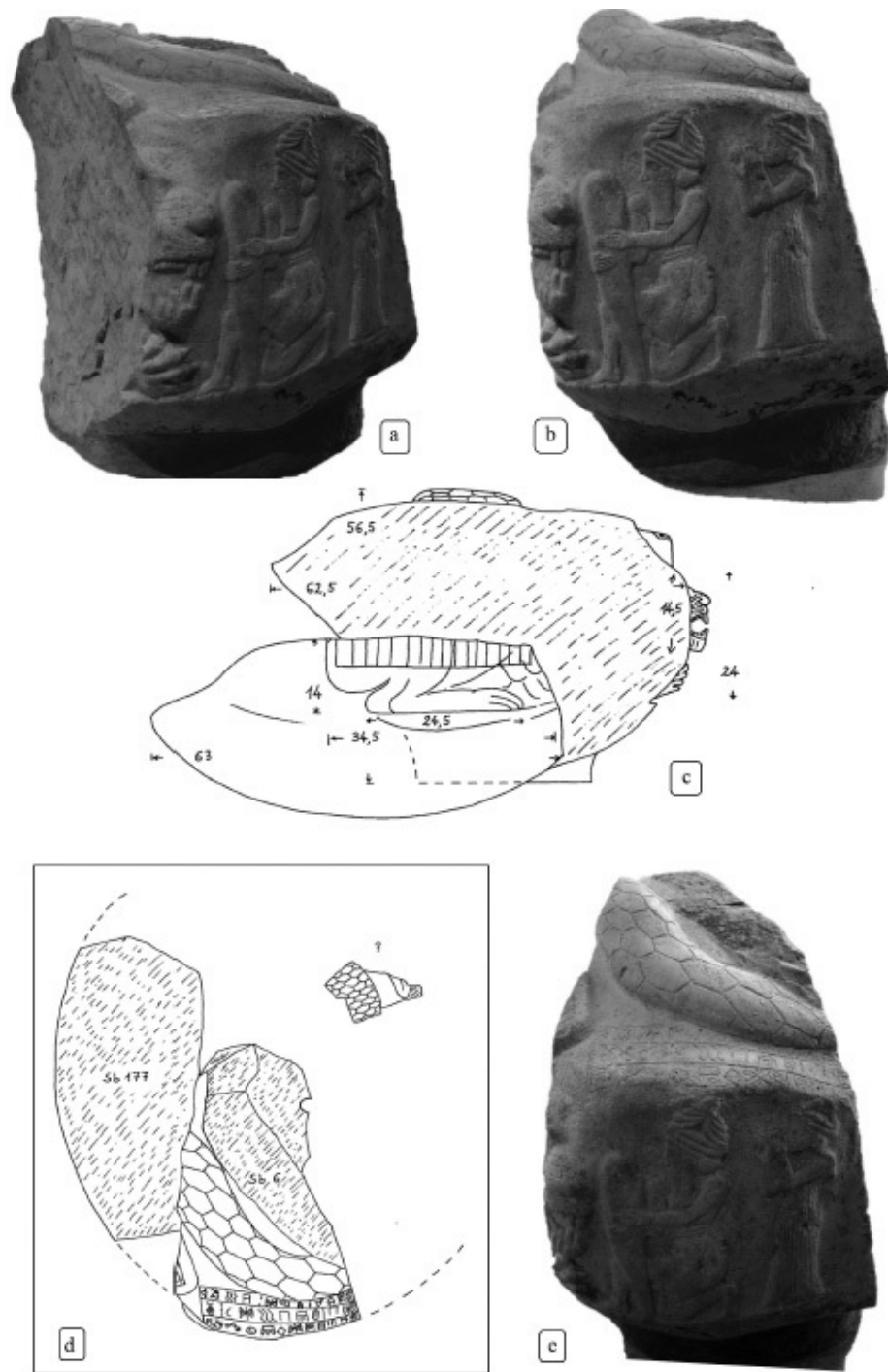


Figure 29.2 [a, b, e] Puzur Inshushinak galet (Louvre Museum Sb 6. Height 55 cm. length 39 cm) (photographs courtesy J. Álvarez-Mon); [c, d] Line-drawing reconstructions of restored galet Sb 6 and Sb 177 (after André-Salvini and Salvini 1989: 54 and 56, Figs. 1 and 2).

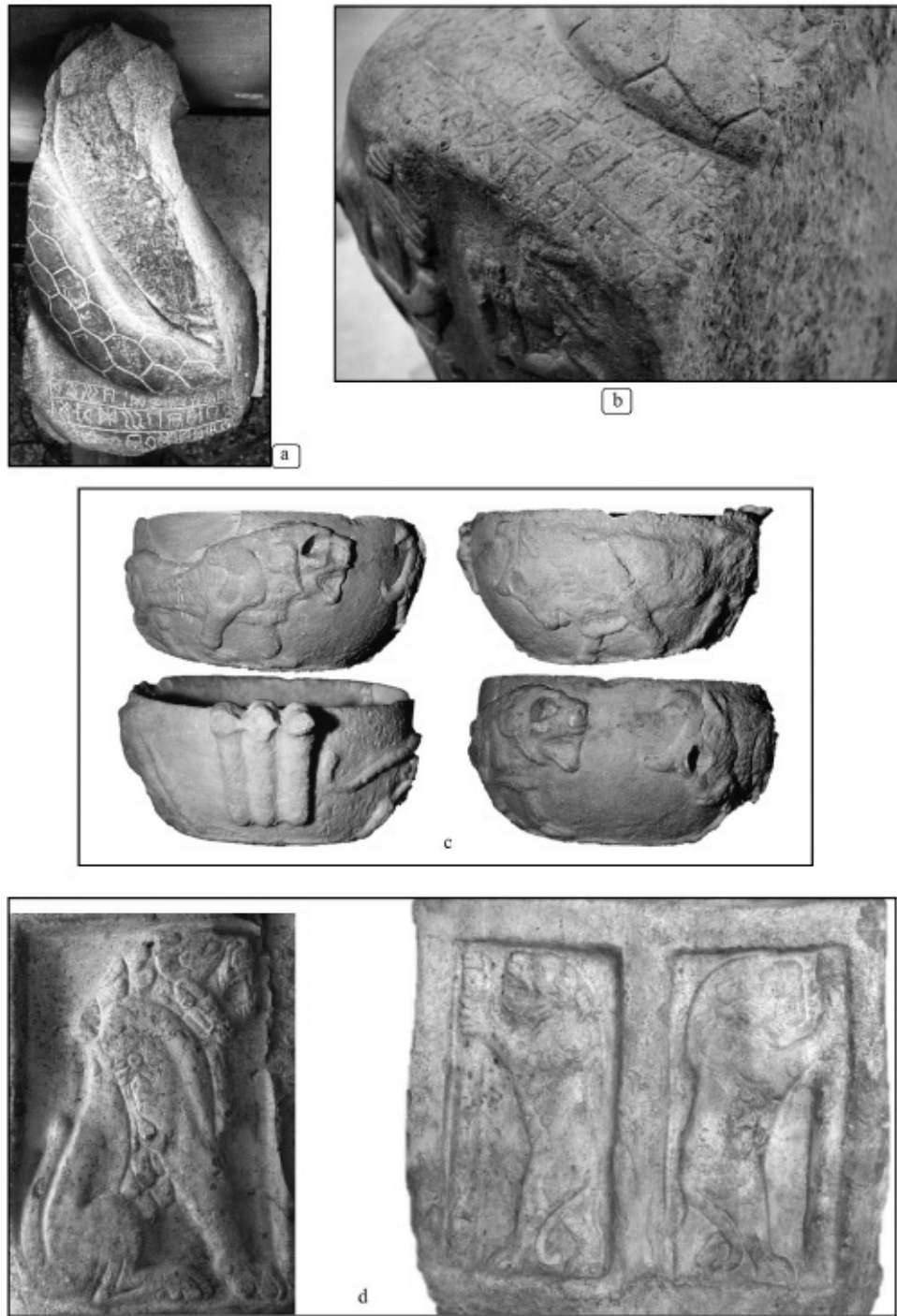


Figure 29.3 [a] View from the top of the Puzur Inshushinak galet (photo by the author); [b] Detail of erasing of the inscription (photo by the author); [c] Cup, with lion confronting bull; three snakes for handle (National Museum of Iran MT 513; Alabaster Gypsum. Susa, found in a terracotta sarcophagus; Diameter 17 cm) (photo courtesy J. Álvarez-Mon); [d] Lions from the statue of the goddess Narundi (Louvre Sb 54 plus head. Statue inscribed by Puzur Inshushinak Akkadian and Linear Elamite inscription. Height without head 84 cm. width 47 cm) (photo courtesy J. Álvarez-Mon).

The vignette of the peg god and the lama has been the primary focus in discussions of the galet of Puzur Inshushinak. The Mesopotamian and more precisely Neo Sumerian reference in this scene is obvious. It has been used repeatedly to consider the date of Puzur Inshushinak and

the monument. Before the textual evidence for the link between Puzur Inshushinak and Ur Namma from Isin was known (Wilcke 1987), the scene was used by Strommenger (1959; 1960) to argue for a post Akkadian date for the ruler. Eppiheimer (2009), in her study of the legacy of Old Akkadian art, has used the scene to define one of three visual streams that she believes Puzur Inshushinak employed in his artistic program to express both his Elamite identity and the competition he felt from Mesopotamia. By her lights, Puzur Inshushinak combined Neo-Sumerian visual references with the visual and verbal legacy of the Old Akkadian depiction of royal power. The Iranian/Elamite thread to which Eppiheimer refers is the still poorly known highland world which is more clearly expressed through the use of Linear Elamite than it is in the existing corpus of imagery (Pittman 2002; Suter 2008).

As has been long observed, the peg god and lama vignette is entirely Mesopotamian and can be dated with confidence to the Lagash II dynasty and the reigns of Ur Bau and Gudea. Foundation figurines identical to the one rendered on the galet were found at Girsu associated with those kings (Strommenger 1964: Figure 146, left). Further, a rendering of such a peg god is preserved on one of the fragments of Gudea's stele from Tello (Suter 2000: ST 55). When Steinkeller (1988) argued on the basis of names and year names that Gudea and Urnamma were contemporary and that they acted together in foreign adventures, this clouded the clear association of the kneeling peg god with the Lagash II dynasty and Gudea and expanded the visual reference to necessarily include the reign of Ur Namma. Basing her dating of Puzur Inshushinak's monument on Steinkeller's equation of Gudea and Ur Namma, Eppiheimer's insightful analysis requires her to conflate the three independent threads that she associates with Puzur Inshushinak's monuments into a single program. The re-dating of Gudea and Ur Namma offered by Sallaberger (2015) allows a reconsideration of the process that might have led to this strange palimpsest of imagery.

It is the relationship between the lion and snake image and the vignette of the peg god and lama that is problematic. This combination is totally incongruous and unparalleled either in Elamite or Mesopotamian art. These visual elements do not belong together iconographically, stylistically or culturally. Only Amiet (1976b) has even attempted to interpret all the elements as an integrated scene by reconstructing the roaring lion as tethered to the peg which would have emerged from the top of the galet. There exists no comparanda for such a reconstruction. In addition to the incongruity of the subject matter, the composition which posits images of completely different scales in relation to each other makes the work incomprehensible as a single visual expression.

In fact, a close inspection of the monument itself makes clear the incongruous relationship between the vignette with the lion and the rest of the monument. The surface of the boulder upon which the body and the head/paw of the lion as well as the snake and the Linear Elamite inscription were carved is smooth, slightly irregular and rounded, clearly following the original contours of the boulder. The same is true of its mate, which never received any

additional imagery along the sides. Rather than following the same curved surface of the boulder, the surface on which the vignette was carved is flat. When viewed from the top ([Figure 29.3a](#)), it is obvious that this surface does not continue the original rounded surface of the boulder but was prepared by flattening the original curve of the boulder. The fact that this flat surface is secondary is further evident because the act of flattening erased the bottom half of the signs of the Linear Elamite inscription on the right-hand side ([Figure 29.3b](#)). This physical relationship between the vignette of the peg god and lama and the original surface of the boulder combined with the clear intervention into the Linear Elamite inscription makes it clear that the vignette was a later addition to the monument. It is likely that the Akkadian inscription on the back of the lion was added at the same time.

This observation allows us to posit at least two phases for the production of this intriguing monument. The first carried the image of the snake similar to the pair with snake and inscription. At some time, perhaps together with the snake, but perhaps in a further elaboration, the roaring lion was carved on the proper right side of the large boulder. Before returning to the implications of the addition of the vignette, it is useful to consider what might possibly have been the remainder of the program carried on the boulder before the addition of the vignette. In this effort, we are assisted by a decorated bowl ([Figure 29.3c](#)) found at Susa and now in the Tehran museum.

The cup, carved in alabaster, was found at Susa in a sarcophagus (Mecquenem 1934: 231–232). No other information about the contents of the sarcophagus is reported. Amiet (1966) dates the cup to the early part of the second millennium, but without any justification. Even if the sarcophagus is of early second millennium date, that provides only a *terminus ante quem* for any object in the burial. The imagery of the vessel presents a striding and roaring lion confronting a bull. Originally the cup had a handle, which is now at least partially broken away, formed by three snakes whose heads peeked over the rim of the vessel. It is the imagery and its style that allows for a reconsideration of the date of this cup.

A comparison of the features of the lion on the cup to images of lions associated with Puzur Inshushinak allow us to move it to the later part of the third millennium. While a comparison with the lion on the galet can be made, the lions on the throne of statue of Puzur Inshushinak's image of the goddess Narundi ([Figure 29.3d](#)) are more useful because they are complete. The close stylistic comparison of features include the open mouth with bared teeth, the outline surrounding the open mouth, the patterning on the muzzle, the comma shape of the shoulder muscle with a hair whorl in the joint, the lappet pattern of the belly hair with contrasting diagonal forms of the upper body hair. All of these similarities make clear the very close stylistic connection between the cup and the monuments of Puzur Inshushinak. Facing the lion on the bowl is the image of a bovid whose lowered head threatens the feline with powerful horns. Behind the confronted creatures are the remains of a handle made up of snakes whose heads curve up over the rim. I believe this combination of imagery makes plausible the

reconstruction of the original program of the galet as a roaring feline facing a threatening bull in the presence of a snake.

The imagery of the lion confronting the bull is strongly associated with Iran beginning with the Proto-Elamite period where it frequently occurs on cylinder seals (Amiet 1972: e.g. 949, 950, 1000, 1012, 1013) but never is combined with the image of a snake. While not documented at Susa in the post-Proto-Elamite period, this theme continues into the second half of the third millennium on the plateau where it is repeated frequently in the soft stone imagery of the Halil River Valley ([Figure 29.4a](#)). The confrontation of feline and bull is also clearly represented on the Shahdad standard (Hakemi 1997: 649/G1) as well as on another bowl, crudely but clearly carved, from Shahdad ([Figure 29.4b](#)) (Hakemi 1997: 607/Fd1). In all of these instances, the combination of feline and bull with snake binds the semantic of these images together into a single message, one that had particular resonance on the Iranian plateau in the region of Kerman during the third quarter of the third millennium. Finally, although very fragmentary, a further image from the plateau can be brought in to the discussion. This is a seal impression found in Trench V of the excavations at the site of Konar Sandal South in the Halil River Valley ([Figure 29.4c](#)). This impression, found together with many others of different style groups (Pittman in Madjidzadeh and Pittman 2008; Pittman 2012; 2014a; 2014b) immediately evokes the image of the lion on the boulder. On what must have been a very large cylinder carved exceptionally deeply, we can see the head of a lion with gaping mouth and a raised open paw with claws extended in a manner almost identical to that seen on the galet. To conclude from this discussion, it is clear that the imagery on the galet, if not the galet itself, had its origins in the highlands, and more specifically in the region of Kerman, which by this time can be identified as the land of Marhashi (Steinkeller 2006).

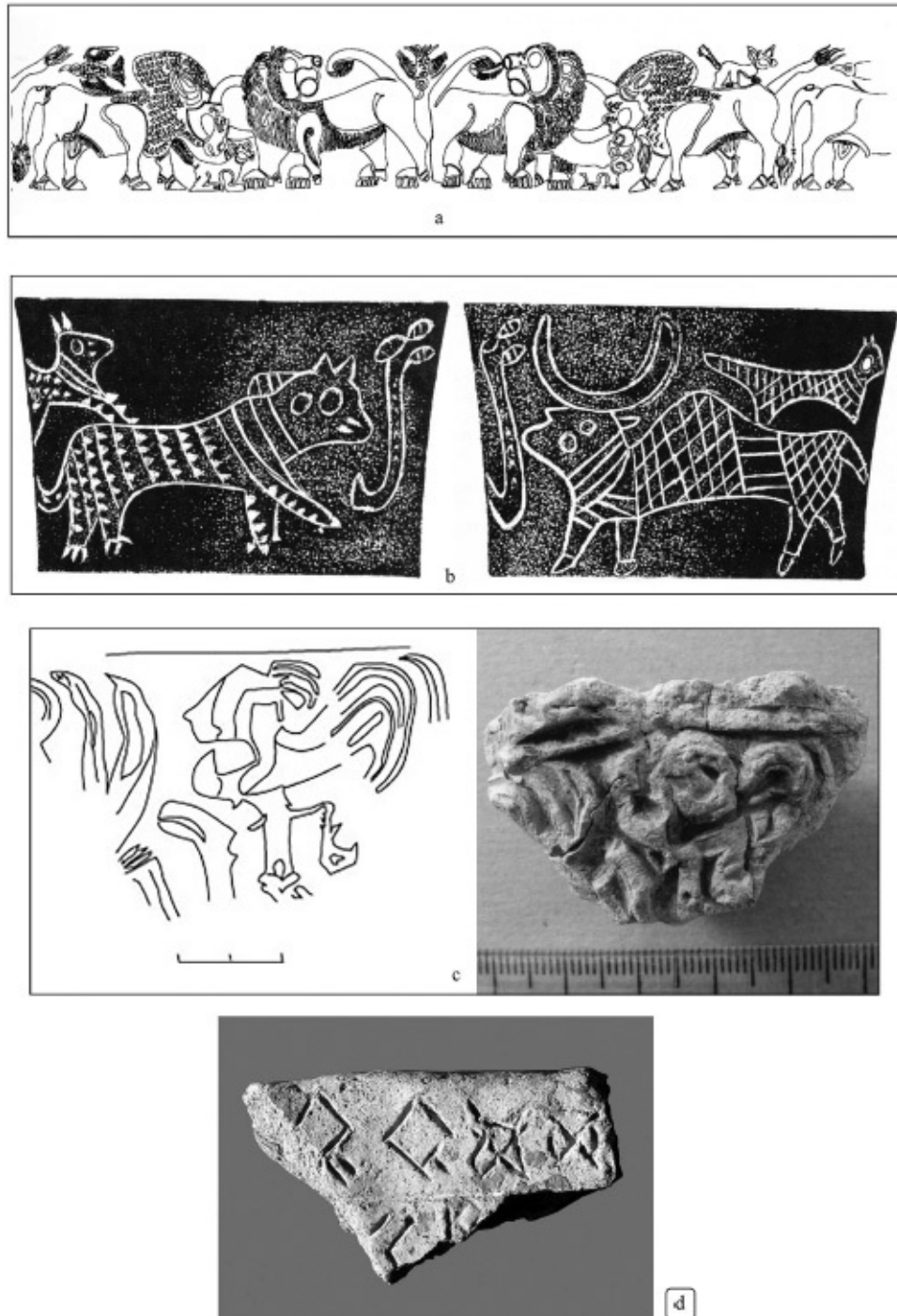


Figure 29.4 [a] Line drawing of steatite canister with lion and bull. Confiscated from looters. Kerman Museum (photo courtesy Y. Madjidzadeh); [b] Carved bowl from Shahdad (after Hakemi 1997: 607/Fd1); [c] Seal impression from Konar Sandal South Tr. V-402 no. 40 (length of seal impression 4 cm. frag. height 2.5 cm) (seal impression and drawing by the author); [d] Baked brick with Linear Elamite Inscription from second citadel level of Konar Sandal South (photo courtesy Y. Madjidzadeh and H. Pittman).

The association of Puzur Inshushinak with the highland is strengthened by the fact the Linear Elamite script at Susa is apparently associated only with his reign, while on the highland it had a considerably longer period of use. Linear Elamite inscriptions are now

documented not only on the silver vase from Fars (Hinz 1969; Potts 2008), and on the pottery rim from Shahdad (Hinz 1971), but also from excavations at Konar Sandal South in the Halil River Valley (Madjidzadeh in Madjidzadeh and Pittman 2008, Madjidzadeh 2011). In the second building level of the monumental structures on the citadel, a baked brick was found that is ([Figure 29.4d](#)) clearly inscribed with Linear Elamite script. The date of the levels of the citadel is established through radio carbon dating to between 2290 and 2210 BCE (Madjidzadeh in Madjidzadeh and Pittman 2008: 79), falling before the late third millennium date for Puzur Inshushinak. With the discovery of the baked brick at Konar Sandal South, combined with the inscription from Shahdad, there can be little doubt that the Linear Elamite script developed in the highland, with the region of Kerman as the most likely location of its invention. More excavation is needed to bring evidence to this conclusion.

What remains is to consider why the vignette of the peg-god and lama as well as the Akkadian inscription were added to this apparently highland monument? For this, the newly established chronological relationship of Gudea and Urnamma, discussed above, can be brought to bear. Steinkeller (2013) proposes that it was an alliance of Gudea and Urnamma that brought the expansion of Puzur Inshushinak to an end. Under that scenario, the inscriptions describing Urnamma's defeat of Puzur Inshushinak and Gudea's defeat of Anshan and Elam would have been one combined, extended effort by southern Mesopotamia to end the Elamite control of lands vital to access to trade routes onto the plateau. Under this scenario, perhaps the vignette could be understood as a defacement of Puzur Inshushinak's monument. Alternatively, Puzur Inshushinak altered his monument to expand its reference to include Neo-Sumerian as well as Akkadian visual tropes adapting the logic of Eppihheimer.

With the understanding that Gudea had his own relationship with the eastern highlands prior to Urnamma, it is possible to suggest another explanation for the curious addition of this imagery. Following that historical reconstruction, Sallaberger (2015: 125), elaborating on his comments, has suggested that "Gudea, in an alliance, perhaps never marched to Anshan himself, but his troops cooperated with Puzur Inshushinak – who in this undertaking achieved rule over Anshan" (pers. comm.). This would allow us to hypothesize that after securing the alliance, Gudea built a temple near Shushtar in a friendly territory. Further, Gudea provided Shimpishhus's (the father of Puzur Inshushinak) men with supplies in Girsu, not as prisoners following Puzur Inshushinak's defeat (Steinkeller 2013) but as members of the alliance between Girsu and Elam. Finally, there are recorded a large number of easterners at Girsu during the reign of Gudea (Schrakamp 2014). Sallaberger suggests that "the presence of foreigners is mostly a sign of good diplomatic contacts which result in the exchange of many persons (like in Ebla, or in Ur III)". Finally, Puzur Inshushinak was able to achieve his rapid and extensive victories over 80 cities in the Zagros lands north of Susa because "he had no trouble on the Girsu border (the most important Mesopotamian border)." (Sallaberger pers. comm.). Gudea's interest was not in expanding his personal control over northern Babylonia; he was

instead eager to have access to the lucrative and vital trade routes leading to the riches of the Iranian plateau, riches that he needed in order to fulfill his obligation to Ningirsu. An alliance with an effective and powerful Elamite ruler would have secured those routes to the benefit of both.

When we look at objects associated with Gudea's reign, several stand out for their Iranian character. Most obvious is the steatite beaker of Gudea with standing mushushu dragons on either side of the twisted snake standard or the steatite lid with entwined snakes (Frankfort 1970: Figs. 101, 102). Both the dragon and the snake are important images known earlier on the Iranian plateau (Pittman 2014a). It is entirely consistent with this historical reconstruction that the alliance between Puzur Inshushinak and Gudea would have been promulgated in both text and images. Puzur Inshushinak's accendence to *danum*, king of the four regions, and king of Awan, at the pinnacle of his power, would have included his ally in arms, Gudea of Girsu. Gudea welcomed to his temple those Elamites and other highlanders who had secured for him access to the riches needed to properly outfit the temple to Ningursu. Each following their own historical mandate, perhaps facilitated somehow by positive personal chemistry, these two rulers converged in a unique, and probably quite brief, moment of alliance that allowed each of them to achieve their personal goals. The galet of Puzur Inshushinak visualizes that alliance, one that has not yet been clearly recorded in texts.

Bibliography

- Amiet, P. 1966. *Elam*. Paris: Archée Éditions.
- . 1972. *Glyptique susienne, des origines à l'époque des perses achéménides. Cachets, sceaux-cylindres et empreintes antiques découverts à Suse, de 1913 à 1967*. Paris: P. Guethner.
- . 1976a. Contribution à l'histoire de la sculpture archaïque de Suse. *Cahiers de la Délégation Archéologique Française en Iran* 6: 47–82.
- . 1976b. *L'art d'Agadé au Musée du Louvre*. Paris: Éditions des Musées Nationaux.
- . 1979. Alternance et dualité: Essai d'interprétation de l'histoire élamite. *Akkadica* 15: 2–22.
- André-Salvini, B. 2006–2008. Puzur Inshushinak. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 11: 129–131.
- André-Salvini, B. and Salvini, M. 1989. Réflexions sur Puzur-Inšušinak. *Iranica Antiqua* 24: 53–78.
- Bahrani, Z. 1992. Statue of Eshpum. In: Harper, P., Aruz, J. and Tallon, F. (eds.) *The Royal City of Susa*. New York: The Metropolitan Museum of Art, 86–87.
- Braun-Holzinger, E.A. 1991. *Mesopotamische Weihgaben der frühdynastischen bis altbabylonischen Zeit*. Heidelberger Studien zum alten Orient, Bd. 3. Heidelberg: Heidelberg Orientverl.
- Eppihimer, M. 2009. *The Visual legacy of Akkadian Kingship*. Unpub. Diss. Harvard University.
- . 2010. Assembling King and State: The Statues of Manishtushu and the Consolidation of Akkadian kingship. *American*

Journal of Archaeology 114: 365–380.

- Evans, J. 2012. *The Lives of Sumerian Sculpture: an Archaeology of the Early Dynastic Temple*. Cambridge: Cambridge University Press.
- Frankfort, H. 1943. *More Sculpture from the Diyala Region*. Oriental Institute Publications vol. 60. Chicago: University of Chicago Press.
- . 1970. *The Art and Architecture of the Ancient Orient*. Pelican History of Art. 4th edition. Penguin Books.
- Gibson, M. and McMahon, A. 1995. Investigation of the Early Dynastic-Akkadian Transition: Report of the 18th and 19th Seasons of Excavation in Area WF, Nippur. *Iraq* 57: 1–39.
- . 1997. The Early Dynastic-Akkadian Transition, Part II. The Authors' Response. *Iraq* 59: 9–14.
- Glassner, J.-J. 1988. La chute d'Akkade: addenda et corrigenda. *Nouvelles Assyriologiques Brèves et Utilitaires* 51.
- Hakemi, A. 1997. *Shahdad: Archaeological Excavations of a Bronze Age Center in Iran*, trans. ed. S.M.S. Sajjadi. Rome: IsMEO.
- Harper, P. and Amiet, P. 1992. The Mesopotamian Presence. In: Harper, P., Aruz, J. and Tallon, F. (eds.) *The Royal City of Susa*. New York: The Metropolitan Museum of Art, 197–214.
- Hinz, W. 1969. *Altiranische Funde und Forschungen*. Berlin: De Gruyter.
- . 1971. Eine altelamische Tonkrug-Aufschrift vom Rande der Lut. *Archäologische Mitteilungen aus Iran* 4: 21–24.
- Hussein, A.M., Hamza, H.A., Thaher, A.K., Kadhum, S.J., Hashem, M., Taha, H.M., Altaweel, M.R., Studevent-Hickman, B. 2010. Tell Abu Sheeja/Ancient Pashime: Report on the first Season of Excavations, 2007. *Akkadica* 131: 47–103.
- Lambert, W.G. 1991. The Akkadianization of Susiana under the Sukkalmahs. In: De Meyer, L. and Gasche, H. (eds.) *Actes de la XXXVIème RAI*. Gand, 10–14 July 1989 (Mesopotmian History and Environment, Occasional Publications 1). Ghent: Ghent University Press, 53–57.
- Madjidzadeh, Y. 2011. Jiroft Tablets and the Origin of the Linear Elamite Writing System. In: Osada, T. and Witzel, M. (eds.) *Cultural Relations between the Indus and the Iranian Plateau during the third Millennium BCE*. Indus Project, Research Institute for Humanities and Nature June 7–8 2008. Harvard Oriental Series Opera Minora vol. 7. Cambridge, MA, 219–244.
- Madjidzadeh, Y. and Pittman, H. 2008. Excavations at Konar Sandal in the Region of Jiroft in the Halil Basin: First Preliminary Report (2002–2008). *Iran* 46: 69–105.
- Matthews, D. 1997. The Early Dynastic-Akkadian Transition, Part 1. When Did the Akkadian Period Begin? *Iraq* 59: 1–7.
- Mecquenem, R. de 1934. Fouilles de Suse 1929–1933. *Mémoire de la Délégation en Perse* 25: 177–237.
- Pittman, H. 2002. The 'Jeweler's' Seal from Susa and Art of Awan. In: Ehrenberg, E. (ed.) *Leaving No Stones Unturned: Essays on the Ancient Near East and Egypt in Honor of Donald P. Hansen*. Winona Lake, Ind.: Eisenbrauns, 211–235.
- . 2003. Reconsidering the Trouville de la statuette d'or: Late Sukkalmah Period at Susa. In: Miller, N.F. and Abdi, K. (eds.) *Yeki bud, yeki nabud: Essays on the archaeology of Iran in honor of William M. Sumner*. Los Angeles: Cotsen Institute of Archaeology.
- . 2012. Glyptic Art of Konar Sandal South, Observations on the relative and absolute chronology in the third millennium BCE. In: Fahimi, H. and Mashkour, M. (eds.) *NĀMVARNĀMEH: Papers in Honour Massoud Azarnoush*. Ganjine-ye Naghsh-e Jahan, Tehen.

- . 2014a. Anchoring Intuition in Evidence: A continuing discussion of cylinder seals from southeastern Iran. In: Bleibtreu, E. and Ulrich Steymans, H. (eds.) *Edith Porada zum 100. Geburtstag: A Centenary Volume*, Orbis Biblicus et Orientalis 268. Fribourg – Göttingen: Academic Press Fribourg, 207–231.
- . 2014b. Hybrid imagery and cultural identity in the Age of Exchange: Halil River Basin and Sumer meet in Margiana. In: Lamberg-Karlovsky, C.C. and Cerasetti, B. (eds.) *My life is like the summer rose. Maurizio Tosi e l'archeologia come modo di vita* (British Archaeological Reports International Series). Oxford: PUB.
- Potts, D.T. 2008. Puzur Inshushinak and the Oxus Civilization (BMAC): Reflections on Shimashki and the geo-political landscape of Iran and Central Asia in the Ur III period. *Zeitschrift für Assyriologie* 98: 165–194.
- Sallaberger, W. 2004. Relative Chronologie von der späten Frühdynastischen bis zur albabyloniashcen Zeit. In: Meyer, J.S. and Sommerfeld, W. 2000 (eds.) *v. Chr. Politische, wirtschaftliche und gesellschaftliche Entwicklung im Zeichen einer Jahrtausendwende*, (Colloquien der Deutschen Orient-Gesellschaft 31). Wiesbaden: Saarbrucher Druckerei und Verlag, 15–43.
- Sallaberger, W. and Schrakamp, I. 2015. The Gutean Period: A Problem of 3rd Millennium Chronology. In: Sallaberger, W. and Schrakamp, I. (eds.) *History and Philology*. ARCANÉ vol 3. Brepols, 113–134.
- Schrakamp, I. 2014. Krieger und Bauern. RU-lugal und aga/aga₃ us₂ im Militär des altsumerischen Lagash. In: Neumann, H., Dittmann, R. Paulus, S., Neumann, G. and A. Schuster-Brandis (eds.) *Krieg und Frieden im Alten Vorderasien, 52nd Rencontre Assyriologique Internationale/International Congress of Assyriology and Near Eastern Archaeology, Münster 17–21 Juli 2006*. (Alte Orient und Altes Testament 401). Münster: Ugarit-Verlag, 691–724.
- Spycket, A. 1981. *La Statuaire Du Proche-Orient Ancien*. Leiden: Brill.
- Steinkeller P. 1982. The Question of Marhashi: A Contribution to the Historical Geography of Iran in the Third Millennium B.C. *Zeitschrift für Assyriologie* 72: 237–265.
- . 1988. The Date of Gudea and His Dynasty. *Journal of Cuneiform Studies* 40: 47–53.
- . 2006. New Light on Marhashi and its contacts with Makkan and Babylonia. *Journal of Magan Studies* 1: 1–17.
- . 2013. Puzur Inshushinak at Susa: A Pivotal Episode of Early Elamite History Reconsidered. In: De Graef, K. and J. Tavernier (eds.) *Susa and Elam, Archaeological, Philological, Historical and Geographical Perspectives*. Mémoires de la Délégations en Perse 58. Leiden: Brill, 293–317.
- Strommenger, E. 1959. Statueninschriften und ihr Datierungswert, *Zeitschrift für Assyriologie und Vorderasiatisches Archäologie* 53: 27–50.
- . 1960. Das Menschenbild in der altmesopotamischen Rundplastik von Mesilim bis Hammurapi, *Baghdader Mitteilungen* 1: 1–103.
- . 1964. *5000 Years of the Art of Mesopotamia*. New York: Abrams.
- Suter, C. 2000. *Gudea's Temple Building: The Representation of an Early Mesopotamian Ruler in Text and Image*. Groningen: STYX Publications.
- . 2008. Review of Von Gudea bis Hammurapi: Grundzüge der Kunst und Geschichte in Altvorderasien by W. Nagel, E. Strommenger and C. Eder. *Wiener Zeitschrift für die Kunde des Morgenlandes* 98: 394–402.
- Van Dijk, J. 1978. Ishbi'erra, Kindattu, l'homme d'Elam, et la chute de la ville d'Ur. *Journal of Cuneiform Studies* 30: 189–208.
- Wilcke, C. 1987. Altbabylonische Abschriften von Königinschriften. In: B. Hrouda (ed.) *Isin, Išān Bahriyāt III: die Ergebnisse*

der Ausgrabungen 1983–1984. München: Verlag der Bayerischen Akademie der Wissenschaften.

CHAPTER THIRTY

The sculptural arts of Elam



Javier Álvarez-Mon

Introduction

Sculpture brings together materials, skill and imagination to manufacture two and three-dimensional physical realities punctuating time and space with layers of culture. The dual highland-lowland geographical setting of Elam largely determined the personality of its multifaceted sculptural expressions, providing access to a range of materials as diverse as clay, stone, bitumen and metal. While Elamites excelled at transforming all of these materials, the bulk of the surviving sculpture has come to us from excavations conducted in the western lowland region of Khuzistan, particularly the cities of Susa, Haft Tappeh and Chogha Zanbil, where sculptural production was conditioned by streams of cultural interaction with Mesopotamia and by a mastery of the use of clay. Besides these urban-based traditions, a significant manifestation of Elamite sculptural arts can be found in monumental reliefs carved in open air sanctuaries located in the highlands.

The ensuing summary provides a chronological overview of sculptural art manufactured in Elam from stone, clay and bitumen (in this volume glazed mud-brick relief panels, glazed clay sculpture, metal sculpture, and glyptic are treated in Chapters 27, 28, 31 and 32 by F. Bridey, N. Daucé, E. Ascalone and M.B. Garrison, respectively). This multiplicity of Elamite sculpture is represented by both elaborate, often large-scale, elite-sponsored works and a rich and ubiquitous corpus of terracotta-made popular works of art.

Elam before Elam (ca. 4200–3000 BC)

The village of Susa was founded around 4200 BC atop two natural outcrops, ca. 10.5 to 7 m high, which overlooked the surrounding alluvial plain. At this time, as many as 2,000 people may have called Susa home. Their presence at the site was physically underscored by the construction of a massive wall, possibly enclosing the northern settlement, and a massive platform on the southern mound believed to have reached 10 m in height. This period was

characterized by the production of original Ubaid-style painted ceramics whose palette of ornamental motifs is defined by abstract geometric forms and animal imagery, revealing influences from textiles and basketry, as well as from the natural environment. This style is embodied in a sculptural tradition dominated by sober stylization and the abstraction of the human and animal form.

The modelling characteristics of earlier so-called ophidian or cobra-like figurines are retained in this period for the representation of the human figure in clay [Figure 30.1a]. A minimalistic tubular body without arms or legs, is topped by a broad flat chest and an elongated head variously interpreted as a sign of cranial-modification, a special type of headgear or hairstyle, or the wearing of masks. Painted black dots covering the body are perceived as clothing, painting, tattooing, or even scars. The representation of sheep figures conveys a similar minimalist approach, underscoring the head and its massive horns as principal appendages. Only one example, whose face lacks eyes and a mouth, has preserved its large round horns, which contrast with the stocky body and legs [Figure 30.1b]. Both the body and horns of this animal were painted with brown dots and stripes. Many of these animal figurines are pierced by a hole and it has been suggested that they could have used as toys or ornaments.



[Figure 30.1 4th millennium and early 3rd millennium terracotta and stone miniature sculpture.](#)

Around 3800 BC, as a result of the rise of urbanism and the likely arrival of new settlers from the west, Susa became integrated into the Uruk-centred Mesopotamian network. The arts developed during the Susa II period (ca. 3800–3100) express new awareness of the dynamic sense of social complexity and actualization embodied in the domestic activities of the community. The latter part of this period (ca. 3300–3100) gave birth to an “archaic” three-dimensional sculpture defined by a new realism. Unique samples of this original style are small alabaster figurines of kneeling females in prayer position. They have distinctive almond-shaped eyes, long hair pulled back off the face by a band, and a long skirt covering the

kneeling legs to create a triangular shaped lower half. In one example, the female appears to support her large breasts between her outstretched arms and below her skirt are visible small feet with detail of ten toes [Figure 30.1c; 6.2 cm high]. The hands of a much taller and possibly male (?) figure are held in front of the chin with the two little fingers crossed, the index and middle fingers touching, and the thumbs meeting under the chin [11.5 cm high].

The variety of sculptural production is expanded by the representation of a standing male found inside a miniature chapel who holds his hands in a worshipping position [Figure 30.1d]. The angular “cubist” stylization illustrates the manufacture of different versions of worshipers to stand before a divinity inside a temple or a chapel. Contemporary with these human statuettes is a small corpus of alabaster animals. Notable amongst these is a seated bear drinking from a vessel and a seated baboon, once fastened by pegs to a base, resting its hands on its knees. The theme of the animal holding a vessel assumes a functional expression in a series of captivating alabaster vessels, probably scent holders, in the shape of frogs, piglets and birds. One humorous rendering shows two frogs clinging to the sides of a piglet [Figure 30.1f].

Third millennium Elam

In the wake of the Uruk “world system” collapse, the so-called proto-Elamite or Susa III period (ca. 3100–2900) manifests new levels of interaction. The appearance of a writing system centred in the Susiana and adapted by a broad range of sites distributed throughout the Iranian highlands and plateau has given rise to the perception of a supra-cultural and economic enterprise referred to as the “Proto-Elamite civilization”. While the specific characteristics of such a network remain unknown, its strong reverberations can be discerned in the ceramic and glyptic repertoires of Susa. Two “archaic deposits” from the Susa Acropole contained well-modelled animal statuettes of an entirely new style that can be witnessed also in the glyptic arts. One white marble statuette represents a couchant bull or cow [Figure 30.1g]. A tenon in the neck indicates that a head, probably made from another material such as precious metal, had been added. On another humped quadruped of grey marble, tenons similarly suggest the addition of legs, tail and perhaps horns to the core of the body [Figure 30.1h]. Illustrating a new attitude to human representation is a fragmentary clay figurine of a female holding her hands above her breasts, originally painted with red body and black head [Figure 30.1e]. This female has been described as monkey-like in appearance. The tubular body, wide shoulders, and forward-extended head are reminiscent of the Susa I/Obeid traditions, suggesting an underlying layer of continuity at the popular level in the manufacture of sculptures in clay.

At around 2675 BC the first unequivocal reference to Elam appears in the so-called *Sumerian King List*. This period brings about an era of “inter-Iranian exchange” and at the same time a new cycle of interaction between the Zagros piedmonts, the Iranian highlands

and plateau, the Mesopotamian city-states and the Persian Gulf. In the eastern sector of the Susa Acropole, significant sculptural works dating to this period were found in connection with a temple probably initially belonging to the Elamite Great Goddess Narundi and dedicated in the Akkadian period to the Sumerian goddess Nin-hursag of Susa “lady of the mountain”, consort of Enki. This coherent corpus of sculptures incorporated no less than 33 statuettes, 12 votive plaques decorated in relief, animal protomes in stone and a collection of bitumen-compound objects without parallel elsewhere (Amiet 1976: 52).

Excavations at Susa produced a small corpus of square-shaped stone plaques characterised by a large central perforation and carved figural imagery. Such plaques are well-known from Mesopotamia where they were incorporated into gateways. Some of those found at Susa have little in common with the Mesopotamian examples in terms of manufacture, style and iconography, while others were clearly influenced by Mesopotamia [e.g. Figure 30.2a–b]. One alabaster plaque [Figure 30.2b] has a horizontal band with a wavy line dividing the space in two registers: the upper register depicts a cultic banquet with two participants seated on low-backed chairs, holding cups and interacting with two possibly naked individuals; the lower exhibits a heroic scene of a naked, bearded male (perhaps one of the individuals shown in the register above?) who spears a lion in the act of attacking a bull. A fragmentary plaque found in the Nin-hursag temple was also divided in two registers, the lower exhibiting three males with a long pointed, triangular nose typical of this period, engaged in activities involving several types of vessels [Figure 30.2d]. The style and iconography of this plaque are comparable with Early Dynastic Mesopotamian examples.

Numerous objects were fashioned at Susa using a bitumen compound made by mixing bitumen with silica or ground calcite or quartz, which was first moulded or modelled into the desired shape and then hardened (perhaps by heat), polished and decorated with inlaid and engraved details. This compound was used to manufacture a range of objects, including plaques, vessels and animal protomes. Here again Susa took advantage of its privileged geographic position bridging west and east to generate a unique material product, finding close iconographic and stylistic parallels with chlorite vessels and figurines manufactured in eastern Iran, probably at Jiroft, the Halil Roud civilization of Kerman.

A damaged plaque found below the paving of the temple of Nin-hursag depicts two naked beardless male individuals framing a small calf (?) and two intertwined serpents, each biting the tip of its own tail [Figure 30.2e]. Both of the males are rather muscular and have a strong square chest, long curly hair, large nose, and protruding lips. Their identification as priests may be proposed based on analogies with contemporary votive plaques from Tello and Ur where bald naked priests are shown offering libations to divinities and temple façades. Their facial and hair features, however, bring them closer to imagery from Kerman where in addition to a diverse array of motifs dominated by serpents, lions, zebus, panthers, scorpions, date tree palms, building facades and water, we see individuals holding serpents with both hands

(Madjidzadeh 2003: 12–17). Similar parallels can be established with a series of cylindrical vessel supports carved with registers. One example exhibits three plants with terminals in the shape of leaves [Figure 30.2c]; another has a single register occupied by four individuals with long hair and long skirt performing a worshipping gesture [Figure 30.2f].



[Figure 30.2 3rd millennium relief plaques and sculpture in limestone and bitumen \(author's own photographs\).](#)

It is through the manufacture of monumental, elite-sponsored sculpture that correspondences with Mesopotamia are best exhibited. A corpus of alabaster votive statues found under the Nin-hursag temple recall the Early Dynastic votive figures found beneath the

floor of the temple of Abu at Tell Asmar and in the temple of Ishtar at Mari. These free-standing sculptures are typified by their long, bulky, fleeced *kaunakes* garment which sometimes covers the left shoulder and arm. Their hands are joined together in front of the chest or waist in a worshiping gesture and their bare feet are represented in a niche carved in the lower frontal section of the skirt. Variations in the styles of these figures may indicate chronological variations: one example, possibly dated ca. 2500, represents an Elamite ruler holding a goat [Figure 30.3a]. The details of his face, the weighty *kaunakes* bulging over his back, and the tail of the goat over his right arm suggest a naturalistic approach.

From the beginning of the Akkadian period (ca. 2375) to the collapse of the Ur III (ca. 2004), except for the brief interval marked by the reign of Puzur Inshushinak, the last king of Awan (ca. 2112–2095), Susiana was integrated into the lower Mesopotamian socio-economic and political network. A sequence of Mesopotamian kings governed Susa as part of their political and economic agenda, which involved both dynastic marriages and military clashes with the eastern polities of highland Elam and Awan. Mesopotamian presence came to an end in 2004 when a coalition of Elamites and *Su*-people from the land of Shimashki captured Ur and its King Ib-bi-Sin was taken prisoner to Anshan together with the statues of Nanna and other Sumerian divinities.

Some Akkadian and Sumerian rulers, as well as their governors, dedicated statues to the gods of various localities under their control, including Susa. Amongst these, Eshpum, “governor of Elam” and servant of Manishtusu (2269–2255) at Susa, usurped an earlier (EDI or II period; ca. 2700) Elamite statue representing a worshiper in alabaster and dedicated it to the goddess Narundi at Susa [Figure 30.3b]. This practice of appropriating earlier works introduces inevitable difficulties into the attribution of an exceptional corpus of fragmentary sculptures found at Susa carved in olivine gabbro from Iran or Oman and, in lesser numbers, limestone. Some were clearly manufactured in Mesopotamia and judging by the inscriptions added later, had been brought to Susa in the 12th century by the Elamite king Shutruk Nakhunte. For those without inscriptions, scholars continue to deliberate over whether they too were usurped or were made locally. This particular problem has not yet been resolved for a number of works associated with Puzur-Inshushinak; one of the first Elamite kings to attack Mesopotamia. His kingdom is marked by the presence of a language known as linear-Elamite (sometimes also referred to as proto-Elamite B), which appears side-by-side with the Akkadian language in bilingual inscriptions carved on the sculptures.



[Figure 30.3 3rd millennium monumental sculpture \(author's own photographs\).](#)

Whether locally made or seized from neighbouring Mesopotamia, these sculptures reveal a new approach to statuary manufacture characterized by life-size and large-scale representations, clearly influenced by the imperial workshops of Akkad (Álvarez-Mon forthcoming b). The lower half of a limestone victory commemoration statue found under the paving of the temple of Inshushinak represents an individual wearing an elegantly modelled wraparound robe [Figure 30.3d]. Fringes knotted into distinctive tassels form an elegant sequence along the borders and the skirt is cut away at the front to show the bare feet atop a

sculpture base preserving fragmentary captions and relief depictions of four floating human corpses. A similar garment is depicted on the preserved lower half of a sculpture representing a seated individual with sandalled feet [Figure 30.3c]. Covering the seat and skirt is an Akkadian inscription providing an account of Puzur-Inshushinak's conquering exploits. Both sculptures suggest that a significant change took place in the history of royal garments, with the abandonment of the heavy fleeced *kaunakes* in favour of a lighter wraparound fringed robe. This development may have occurred early in the Akkadian period under Sargon or Manishtusu and seems to have influenced later ruling classes of Mesopotamia's neighbours, from Mari's *shakkanaku* rulers Iddi-Ilum and Puzur-Ishtar to Susa's Puzur-Inshushinak.

A more traditional approach was taken in the representation of the exceptional statue of the Elamite goddess Narundi discovered inside a small shrine located to the south of the Nin-hursag temple [Figure 30.3e]. The enthroned goddess, who holds a vessel in one hand and a branch in the other, is dressed in a *kaunakes* and a divine headdress with triple row of horns. A series of holes in the surface of her face, ears and possibly headdress suggest they were once embellished with incrustations or sheet metal. Her throne is positioned atop a platform decorated on the front with two lions facing a flower/rosette, on the sides with two roaring lions sitting on their haunches, and on the back with two roaring lions standing back-to-back, each holding a pole.

A small corpus of female figures displays a refined local approach to the depiction of garments and an assortment of hairstyles and headdresses: a small head in alabaster, a limestone relief representing a suppliant goddess, several small alabaster worshiper figurines [e.g. Figs. 4c-d]; and, from a burial context, an elegant gypsum figurine whose missing arms and head had probably been made from a different material and fitted into the tenons provided.

At the popular level, a multitude of terracotta female figurines testify to a continuous vernacular tradition of clay modelling. At around 2100 BC, the use of single-faced moulds for casting clay figurines virtually supplanted hand modelling. Initially the moulds were shallow and reproduced hand-modelled types to give the impression of sculpture in the round, but later the back was flattened and excess clay left around the figure's silhouette, forming a frame. Thus was born the figurine-plaque, which would become widespread during the second millennium.

Further illustrating the diverse sculptural production of the time are a pair of couchant lions with a vertical hole through their midsection found near the Inshushinak temple; a votive boulder with lion head; and two inscribed boulders with coiled serpents. The largest of these (see Pittman, Chapter 29 in this volume) was vertically perforated and bears a fragmentary register depicting a massive roaring couchant lion facing a deity who kneels on one knee and holds an oversized foundation nail. Behind him stands a suppliant goddess with raised hands. Yet another variation in rendering showing close parallels with Akkadian sculpture is a series

of fragmentary reliefs carved on the base of a diorite statue, representing individuals with long beard and long hair tied back in a bun-style arrangement. One clearly wears a cylinder seal strung around his neck [Figure 30.4a].



[Figure 30.4 3rd millennium monumental stone sculpture \(author's own photographs\).](#)

From regional power to Empire (ca. 2000–1500 BC)

The sculptural arts of the Old Elamite period reflect a time of increasing wealth. By now the power of the kingdom was concentrated in two major centres: the western lowland capital of

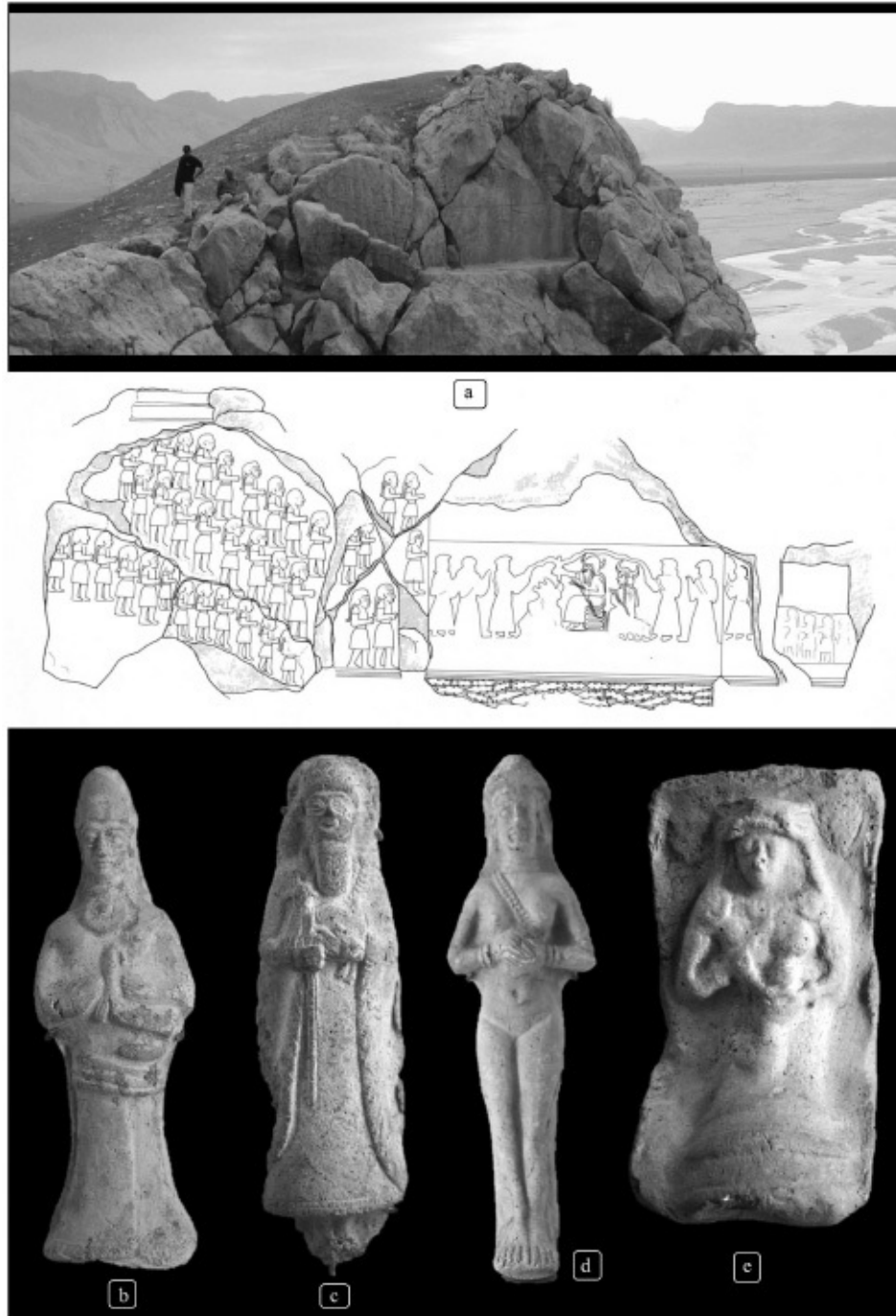
Susa and the eastern capital of Anshan (Tal-e Malyan). Sculpture of this period was produced in differing scales across three media: carved rock relief (a monumental relief at Kurangun), modelled clay (monumental lions, figurines, and funerary heads) and carved bitumen-compound (vessels).

The open air sanctuary of Kurangun is situated on the ancient highway linking Susa and Anshan. It features a rock relief carved on a cliff ca. 80 m above ground level atop an outcrop of the Kuh-e Pataweh [Figure 30.5a], overlooking the Fahliyan River as it flows through the panoramic Mamasani region. The relief offers an exceptional manifestation of Elamite art and religious ideology. The vertical cliffside was cut out to create a three-dimensional spatial unit oriented in a north-west/south-east direction. Three flights of rock-cut stairs descend from the summit of the outcrop down to a rectangular 5 × 2 m platform cut out to form a basin. Still visible on the horizontal basin floor are remnants of 26 relief-carved fish. On the vertical surface is a rectangular panel carved in low-relief illustrating an enthroned divine couple. The bearded male divinity sits on a coiled serpent throne holding a ring and rod in his right hand from which two arched streams of water emerge. One flows forwards and one backwards towards two groups of elite worshipers, most likely composed of two males and a female. This scene displays an iconic Elamite visual formula shared by Old and Middle Elamite seals, stelae and, most likely, replicated in three-dimensional sculptural form [see [Figures 30.7a, b, d](#)]. The central panel and stairs were carved sometime between the 19th and 17th centuries BC (Kurangun I). The relief was expanded between the 9th and 8th centuries with the addition of a series of worshipers, characterised by their short garments and long braided hair ending in a knob, along the staircases and on both sides of the central panel (Kurangun II). More worshipers were incorporated on the right side at the end of the Neo-Elamite period (Kurangun III). The reliefs are not visible from the bottom of the valley, suggesting that direct interaction with the sanctuary and its divinities took place via the pathway provided by the staircases leading to the intimate narrow platform, where the worshiper was graced with a dramatic natural setting pulsating with a numinous vitality (Álvarez-Mon 2014).

Also surviving in monumental scale are two painted terracotta guardian lion sculptures that guarded a temple in the southeast of Susa's Ville Royale [Figure 30.4b]. The best-preserved of these measures 86 cm high and 75 cm long. Cylindrical frames provide the body and forelegs, over which the head, rear legs and paws were added. The lion's mouth is wide open, revealing its teeth and small projecting tongue. The style of composition is reminiscent of two guardian lions (ca. 1800) from the Dagan temple of Shaduppum (Tell Harmal), a small provincial centre of the kingdom of Eshnunna.

The art of terracotta survived also in miniature figurines of *kaunakes*-robed goddesses with arms raised in a gesture of salutation and worship. The presence of two holes in one of these sculptures suggests they may have been fixed to a wall. Further indication of the popularity of terracotta figurines and their variety of styles is provided by a corpus of single-faced moulded

figurines representing a musician (a priest?) playing a small harp [Figure 30.5b] a man wearing a long robe with fringed cloak, carrying a staff and a male goat [Figure 30. 5c], naked females clasp their hands in front [Figure 30.5d] and, most unusual, a woman laying on a bed (?) breastfeeding a child [Figure 30.5e]. Because these figurines were cast-made, one is tempted to contemplate a large-scale reproduction and dissemination of this unique imagery.



[Figure 30.5 Old Elamite. Kurangun monumental rock relief and terracotta sculpture \(author's own photographs; line drawing after L. Vanden Berghe 1984: 28, Figure 2\).](#)

Further exceptional examples of Elamite clay sculptural production are the modelled, life-

size human heads deposited in funerary contexts. Since some were placed in association with the deceased's skull, their serene and contented facial features may represent an idealized portrait of either the departed or their relatives. Most were modelled in clay around a central hollow cylindrical goblet with eyes made separately and placed inside the ocular openings. One remarkable female head is represented with either a headdress or a complex braided hairstyle. Her face is broad, with a thick mono-brow, large eyes and nose, rounded cheeks, and a slightly protruding chin. Some heads were evidently painted. For example, one male head with a characteristic "visor" hair-style, narrow bearded face, mono-brow and large almond-shaped eyes retains traces of its original polychrome decoration in white, red, blue and yellow colours (Álvarez-Mon 2005).

A rare surviving example of ivory-carved sculpture is a remarkable small, headless figurine, measuring 9.4 cm in height, representing a female (a queen?) clasping her hands together in front. Her elegantly modelled wraparound robe and long scarf with distinctive tasselled borders recall the robe of Puzur-Inshushinak. Further elaborating this costume are a pair of bracelets on each wrist and a choker-style necklace with a counterweight at the back.

Another unique Elamite sculptural corpus is a series of bitumen-compound vessels, mostly also found in burial contexts, whose function remains open to speculation. The manufacture of these vessels evolves into a new artistic tradition of remarkable longevity. Animals are now depicted either in relief or with their head or whole body emerging from the vessel in the form of a three dimensional sculpture. In the latter case, for example, a protruding couchant ibex turning its head to look backwards or a pair of standing suppliant goddesses wearing *kaunakes* robes might have served as the vessel handle. In a further intricate composition, a round platter is supported by three legs carved separately and attached to the vessel with a mortise. The leg terminals are in the shape of ibex whose rear body and horns extend elegantly backwards to integrate into the leg of the vessel.

The golden age (ca. 1500–1100 BC)

The second half of the second millennium was a dynamic period in the history of Elamite politics and sculptural production. The first part of this period is dominated by the figure of Untash-Napirisha (ca. 1340–1300), a ruler of Kassite maternal lineage. His reign is marked by an artistic golden age and a religious "revolution" evidenced in the foundation of a vast cultic complex known as Al Untash-Napirisha (Choga Zanbil). Other key players who appear later in this period are Shutruk-Nahhunte and his two sons Kutir-Nahhunte (1155–1150) and Shilhak-Inshushinak (1150–1120). The cultural accomplishments of the Shutrukid dynasty are often obscured by their infamous actions in Mesopotamia, which continued a long-standing foreign policy of vindication whereby Elamite kings of combined Elamite-Kassite ancestry asserted their claim on the Babylonian throne. Elamite raids on Mesopotamian cities

eventually ended with the collapse of the Kassite dynasty in 1155 BC, marked by the death of the Kassite king, the “retirement” to Elam of Babylon’s statue of Marduk and other deities and the removal to Susa of a substantial volume of “trophy”. By bringing numerous ancestral sculptural masterpieces to Susa as gifts to the Elamite gods – amongst the most celebrated being the Victory Stele of Naram-Sin and the Code of Hammurabi – these Middle-Elamite rulers positioned themselves as the legitimate inheritors of Mesopotamian heritage.

During this period, the arts of terracotta modelling continue to exhibit unique Elamite expressions of genuine creativity. Two exceptional human heads and a mask found in the same “artist’s workshop” at Haft Tappeh, and two funerary heads from Susa deliver insights into the individualised treatment of the face and adornment. Both Haft Tappeh heads were constructed around a hollow cylindrical core. One is described as the portrait of a male [Figure 30.6a] and has a smooth hairless face, almond-shaped inlaid eyes, a mono-brow, and elaborately braided hair. The hairstyle is complemented by a headdress comprising a pair of bands originally painted a brown-yellow colour and adorned with raised circular bosses painted at the centre to replicate incrustations. A sophisticated necklace made of four parallel rows of ivory-like beads surrounds the neck. The second head, described as the portrait of a female [Figure 30.6b], also has an elaborate braided hairstyle finished with a wide band painted blue with brown borders and decorated by raised circular bosses painted black and white. The two painted heads from Susa are both male and share similar characteristics. They are modelled around a hollow cylindrical core and like the Old Elamite examples, the eyes were made separately and inlaid into the ocular holes. The hairstyle is modelled in the typical Elamite “visor-style” and the beard demarcated using small squares with incised curls.

The Middle Elamite period brings forth a rich corpus of moulded terracotta sculpture, which evolves and diversifies to include bejewelled naked females with narrow or broad hips holding their breasts [e.g. Figures 30.6c-d]; naked couples lying on a bed [e.g. Figure 30.6f]; and naked, bow-legged elderly men playing a string instrument (the ancestor of the tar) and sometimes carrying a monkey on their shoulders [Figure 30.6e]. These popular artistic expressions do not seem to find parallels in round sculpture. Instead, except for animal representations which continue to be manufactured in terracotta and stone, a new durable artificial material known as faience – a glazed sintered quartz body with high siliceous content and low clay – began to dominate miniature sculptural representation. Examples found in a temple dedicated to the goddess Pinigir at Choga Zanbil include the head of a young individual (a female?) with short hair and mono-brow [Figure 30.6h]; the headless body of a female who holds her hands, one overlapping the other, in front of her waist and wears bracelets and a long garment with circle decoration and fringed borders [Figure 30.6g]; and a vessel in the form of a head with a smiling face [Figure 30.6i]. Three votive male figurines in faience, one holding a dove in his hands, were found in a funerary context near the temple of Inshushinak at Susa. Their visor hairstyle, lack of facial hair, mono-brow, large nose, and broad

shoulders underline a general approach to male representation at this time.

An impressive body of royal-sponsored sculptural works dated to this period includes stone sculpture in the round, stelae and monumental low relief carved in stone and monumental moulded baked brick relief friezes. To the first group belongs a fragmentary throne made of three coiled serpents with a single-horned head that either sticks out its tongue or spits a flame [Figure 30.7b]. As mentioned above, this piece recalls the divine snake thrones represented on royal seals and in the Kurangun relief. A fragmentary sculpture of a male divinity with long beard, side hair locks and naked chest, holding a double serpent in his right hand, may have originally been associated with such a throne [Figure 30.7a]. The theme of the serpent as a protective guardian takes a further dimension as a transmuted “dragon head” door-lock mechanism. The symbolism of the “serpent-dragon” in Elamite cosmology as a protective being that can permeate both physical and metaphysical realms becomes apparent in the fragmentary stele of Untash Napirisha [Figure 30.7d]. This ca. 2.6 m high monument is divided into four registers by guilloches. The top register – the celestial realm – depicts a divinity, probably Inshushinak, sitting on a serpent throne holding a staff and a serpent. The register below – the earthly realm – depicts the king facing a female priestess named *Utik* (perhaps the king’s mother) and behind him stands his wife *Napir-Asu*. In the register below – the sweet flowing water realm – two fish goddesses covered with scales hold cordlike streams of water that flow between vessels at the tips of their tails and at the top of the register. The remaining portion of the bottom register – the undergrowth realm – depicts a goat-man who stands facing a tree, grasping its branches. It is usually presumed that a mirror image of a second goat-man can be reconstructed for the missing portion. The entire composition, from bottom to top register, is vertically framed by two serpents whose bodies penetrate all four layers.



[Figure 30.6 Middle Elamite. Terracotta and faience sculpture \(author's own photographs\).](#)



[Figure 30.7 Middle Elamite. Monumental stone sculpture and highland rock relief \(author's own photographs\).](#)

Providing evidence for sculptural art of the Shutrukid dynasty is a relief panel from Shekaft-e Salman in the valley of Izeh/Malamir depicting a king, prince and queen of the Shutrukid royal family [Figure 30.7c]. The relief is elevated 8.5 m high, to the right of a large natural cave with a water source and a seasonal waterfall. All three figures are oriented towards the cave and make a worshiping gesture. The king is portrayed with the “visor” hairstyle, long beard, long pair of side braids and back braid; the queen wears a well-fitted spherical bonnet, hair pulled up in a bun and a broad collar around the neck with an extension

at the back. These physical attributes are idealized signatures of Elamite royalty, which is contrasted with the non-official imagery of the monarch found, for example, in a “family portrait” of Shilhak-Inshushinak engraved on a jasper pebble. Here the king hands a gift to his daughter, the princess Bar-Uli. He wears a short-sleeved, long garment ending in a fringe and a pair of bracelets on each wrist; the right arm and hand rest over his lap with extended fingers; the left hand is raised and holds a small rounded object, maybe a self-reference to the jasper pebble. The princess, who wears a distinctive long robe with wide sleeves, extends a hand towards her father. This same king was responsible for a monumental moulded baked brick wall frieze, probably part of the *kumpum kidua* (exterior sanctuary) of Inshushinak in the Apadana. No less than 20 heads of the bull-man divinity belonging to this composition were found. Their association with a series of what must have been at least 20 pairs of alternating palm trees and suppliant goddesses points to a temple façade of remarkable dimensions.

The first millennium

The first millennium saw an outburst of faience production distinguished by a mastery of technological skills, the use of playful, vibrant colours and the adaptation into various formats of a vivid numinous world populated by winged griffins and horses, bearded sphinxes, horned geniuses, bovine gods and goddesses, as well as horses, lions, bulls and human worshipers. These themes are manifested in a variety of objects: plaques, pegs, figurines and knobs and pyxides with protomes. One example of the latter is a finely carved square container with two female heads projecting from opposite sides. Underneath each head is a relief depiction of a bird-headed griffin flanking a tree; on the other two opposing sides are bearded androcephalic sphinxes in relief.

The dominance of faience may in part explain the visible reduction of traditional bitumen production. A 9.3 × 13 cm relief plaque provides a rare and celebrated example of the use of bitumen compound at this time. It depicts an elite Elamite woman seated on a chair with her legs crossed spinning yarn [Figure 30.8a]. One of her most distinctive features is her voluminous mass of long hair sectioned and collected into an elegant arrangement on top of her head. The hairstyle is completed by three further sections of hair circling below the ear and a single narrow band encircling the head. She carries six bracelets on each arm and wears a mantle or shawl with a ladder-style border decorated with disks. Of much interest to note is that in contrast to other contemporary and earlier depictions of elite clothing, fringes are not shown along the borders. This absence recalls the Assyrian *qalpu* garment (stripped/peeled/divested of fringes). Her unusual garment, elaborate hair, and gesture of holding (and turning?) a spindle, together with the table in front her laden with a fish and round-shaped cakes (?) and the servant fanning her from behind are suggestive of a ritual

context.



[Figure 30.8 Neo-Elamite sculpture. \[a, b, c\] relief plaques; \[d\] base of sculpture; \[e\] stele of Atta-Hamiti Inshushinak; and \[f\] Neo-Elamite monumental rock relief from Kul-e Farah \(KF1\) \(author's own photographs and line-drawings\).](#)

An object of great interest thought to have been originally manufactured in Mesopotamia during the Kassite period is a stela depicting an enthroned divinity offering the rod and ring to a ruler who stands facing him on the opposite side of an incense burner or fire-stand with triangular-head. The stele was recut to replace the presumed image of a Kassite ruler with an Elamite one. The king has a “visor” hair-style complemented by a pair of long side braids

ending in a loop and a small braid at the back. The dating of this addition remains unresolved; at present only a broad 12th–8th century range can be offered (Álvarez-Mon 2015b:19).

Belonging to a period of renewal at Susa after 625 BC is a small corpus of limestone plaques and stelae embellished with relief. One limestone plaque that had originally belonged to a monumental construction, perhaps of religious character, was carved with an image of a divine being striding with a dagger raised in the left hand and a fantastic hybrid following behind [Figure 30.8b]. A lotus border frames the composition and at its center is a pierced rosette. Another limestone plaque depicts a four-winged beardless genius kneeling on one knee, followed by a human-headed winged scorpion with lion paws [Figure 30.8c]. The genius wears an Elamite-style helmet with a rounded protuberance on top and perhaps a frontal visor. Together they attest to an urban-based sculptural production of an Elamo-Assyrian style, reflecting both a history of interaction with Assyria and a post-Assyrian political and cultural Elamite “renaissance”. This period may have incorporated the kingdom of Atta-hamiti Inshushinak, whose reign has been dated variously between ca. 650 and 520. From the Acropole at Susa was recovered a fragmentary stele with a low relief panel depicting Atta-hamiti-Inshushinak, son of Hutran-tepti, “*king of Anshan and Susa, expander of the realm, master of Elam, sovereign of Elam*, together with his queen [Figure 30.8e]. The king wears a composite hemispherical helmet decorated with rosettes and a heavily ornamented garment bordered by typical Neo-Elamite ladder bands with bracteates and fringes. His beard is comprised of rows of short locks and long straight locks, and there is a distinct absence of hair over the tip of his chin. Facing him is the Elamite queen dressed in a well-fitted spherical bonnet and a robe ornamented with broad fringes and ladder bands with nested circles. She wears a necklace linked at the back by a knob-shaped clasp. From the clasp emerges a long hatched extension that runs along the shoulder. Though fragmentary, the representation of this late Neo-Elamite queen bears remarkable similarities to the late Middle-Elamite Elamite queens (12th century) at Shekaft-e Salmān (Īzeh/Mālamīr), further emphasizing artistic continuity in the representation of female royal accouterments and perhaps garments.

Another exceptional, though damaged, example of late Elamite sculptural art is a square basalt pedestal (59 × 59 cm) sculpted in relief on three of its four faces. One side (Face A; shown in Figure 30.8d) depicts two wounded or dead individuals – one with dislocated arms and legs – being consumed by vultures. Another is falling head first, about to crash against the rocks below. A second side (Face B) depicts a naked bearded individual whose hands are tied behind his back. A third side (Face C) may represent a family followed by a smirking conqueror who grasps the hair of the man in front. The scene takes place at the base of a walled town and can be considered one of the last Near Eastern visual expressions in a long tradition of representing the aftermath of the conquest of a city (Álvarez-Mon forthcoming a).

At Kul-e Farah (henceforth also KF) in the highland valley of Izeh/Malamir, six rock reliefs (KFI-VI) dating to the Neo-Elamite period survive today in various states of preservation.

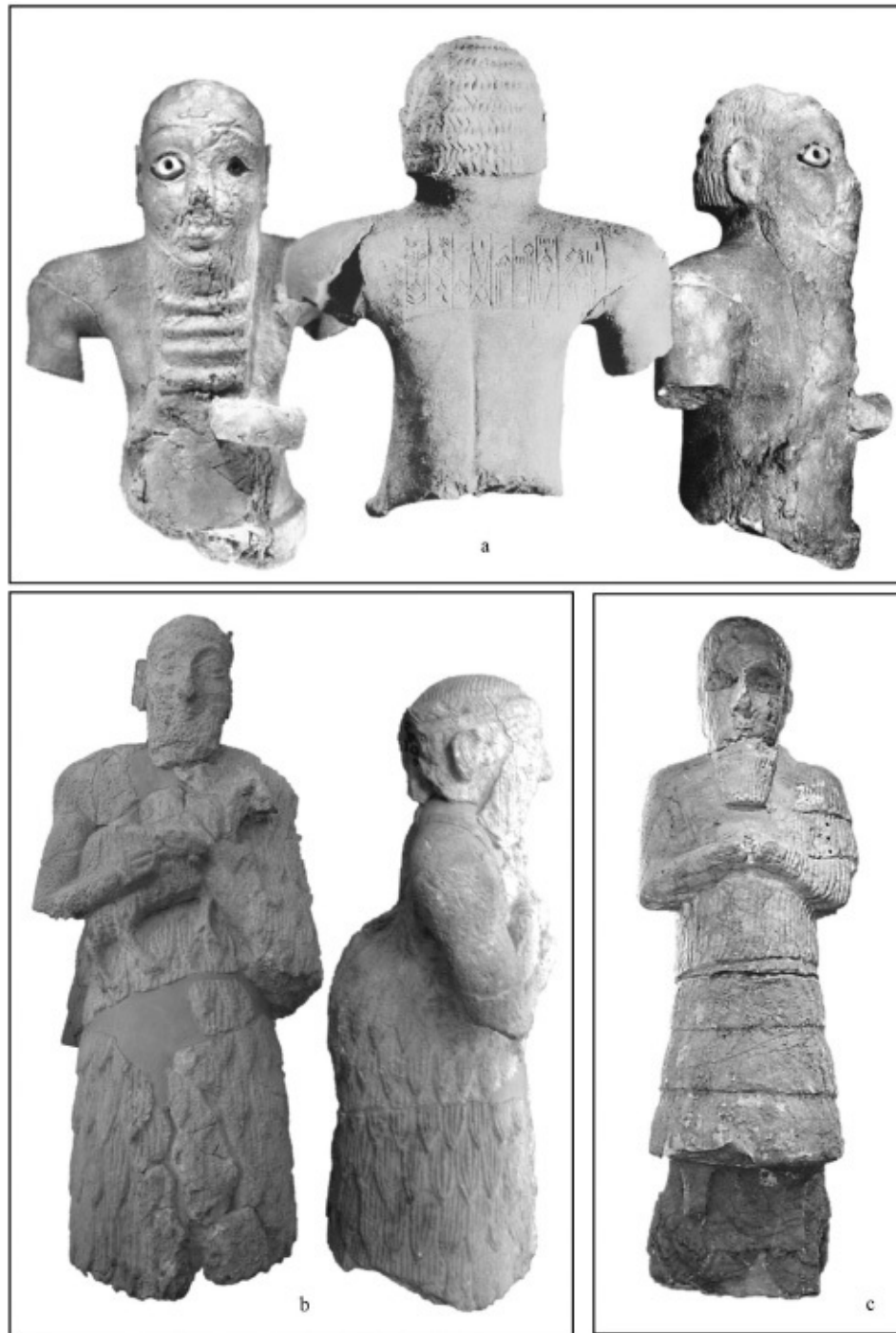
They were carved in a natural “amphitheatre”, which is surrounded by cliffs on three sides and has a seasonal creek whose source is located at the southern end of the gorge. These reliefs underline the significance of the natural landscape (caves, waterfalls, water sources) in determining locations for the enactment of religious rituals and the placement of monumental reliefs without parallel in the artistic record of the ancient Near East. Except for the relief of KFI, which can be dated to ca. 650–575 after its inscription by Hanni, ruler of Aiapir, the other reliefs must be dated on stylistic grounds.

KFIV (9th–8th centuries) expands along the vertical surface of the rock cliff (ca. 17.70 m long and 6 m high). It depicts a communal banquet with no less than 141 participants whose position in the social hierarchy is determined by their placement inside parallel registers, the activities they perform and their type of garment [Figure 30.9a]. Presiding over the ceremony is a king seated on a long-backed throne framed by two tables set with food and vessels. He is accompanied by attendants; a group of individuals wearing long garments; a weapon-bearer/chief archer (carrying a bow, quiver and sword); archers; six harp players and a conductor. The remainder of the group comprises more than 100 similarly represented individuals in short kilted garments. The best preserved of these is depicted with one hand positioned directly in front of his mouth holding a morsel of food, most likely a piece of meat. He is represented in profile, except for his chest, which is shown frontally. He has broad shoulders, narrow waist, short kilted garment and hair collected into a distinctive long braid. In his left hand he holds a short bow. Sections of the hair, neck, back and right shoulder have preserved evidence of the plaster, engraving and possibly pigmentation originally added to the surface of the relief. While much of the volume of the relief has been lost through surface erosion, it is still possible to appreciate the “natural” plastic treatment of body parts achieved by combining a relatively shallow depth of carving with smooth plastering of the surfaces (Álvarez-Mon 2013, 2015a, forthcoming a).

The vertical surfaces of boulder KFIII (8th–7th centuries) were entirely carved with a procession of about 200 participants and herds of domestic animals. At the head of the procession, a large male figure, perhaps a king or a deity, stands atop a platform supported by four kneeling male individuals who wear long fringed garments and head caps. Behind follow two flocks of 18 rams and three zebus, groups of naked (?) individuals and more groups in long and short garments. Three harp players face another oversized figure followed by large numbers of worshipers arranged in parallel registers. Individual N180 is one of the best preserved of the group; he makes a “clasped hands” gesture and his hair style combines a short braid at the back and a protruding “visor” hairstyle at the front (Álvarez-Mon forthcoming a).

The reliefs of KFII and VI (7th–6th centuries) were also carved on boulders. KFII is characterised by the presence of four individuals inside a well-defined rectangular panel; one large-scale individual, and a sacrificial scene showing two naked individuals. One stands making a gesture in a backward direction; the other is bent over butchering a zebu. Below are

the carcasses of six sheep with large rounded horns. KFVI was carved over the northwest face of a rock boulder and shows another large-scale individual standing on a podium carried atop a platform by four platform bearers. Standing behind are nine worshipers arranged along three horizontal registers in groups of three. A single worshiper is located to the right of the platform bearers. Except for two of the platform bearers, all individuals are oriented towards the left. The heavily eroded KFV (7th–6th centuries) is carved near KFIV on the vertical cliff face of a rocky outcrop on the left bank of the creek. Its iconography and compositional structure are similar to KFII, with a large-scale human figure facing the sacrifice of animals and four worshipers arranged behind him on a vertical register. A novel element is the inclusion of a fire altar (Álvarez-Mon 2010a, 2015, forthcoming a).



[Figure 30.9 Neo-Elamite highland reliefs from \[a\] Kul-e Farah \(KFIV\); and \[b\] Naqsh-e Rostam \(author's own photographs and line-drawings\).](#)

The most recent is KFI (650–575); a multifaceted artwork assimilating aspects of the earlier Kul-e Farah and Shekaft-e Salman reliefs [Figure 30.8f]. A large Elamite cuneiform inscription occupying the upper half of the relief identifies the large figure as Hanni, son of Tahhi, “prince” or “chief” (kutur) of Aiapir and vassal of the Elamite king Shutur-Nahhunte, son of Indada. Hanni wears a bulbous cap, waist-length braid, and heavily fringed garments decorated with rosettes; behind him stand the smaller figures of two court officials, a weapon

bearer (captioned “Shutruru, the Master of the Palace”) carrying a bow, quiver and sword and an individual wearing a long flounced garment making a clasped-hands gesture. A trio of musicians play a horizontal harp, a vertical harp and a square drum, while a zebu is butchered next to the carcasses of rams and a fire altar or censer (Álvarez-Mon forthcoming a).

Not unlike the central relief of the Kurangun open-air sanctuary, the central panel of the ca. 17th-century-BC relief carved at Naqsh-e Rostam near Persepolis shows the vestiges of a divine couple seated on a characteristic divine throne of coiled serpents [Figure 30.9b]. Additions were made to this relief during the Neo-Elamite period but would later be almost completely obliterated by the cutting of a new panel at the time of the Sasanian King Bahram II (276–293 AD). Only the remains of a crowned head of a “lady” or “queen” were preserved on the left side, and on the right side, around the corner, a standing individual sometimes identified as a king. This series of reliefs manifests a continuity of cultic practices for around two millennia at this important religious center. Besides their religious dimensions, the late Neo-Elamite additions have significant political implications. In this region of Fars associated with the eastern capital of Anshan, the incorporation of a crowned queen sometime in the second half of the 7th or the early 6th century BC assumes all the appearance of an official claim and a statement of political control (Álvarez-Mon 2010b).

References

- Álvarez-Mon, J. 2005. Elamite Funerary Clay Heads. *Near Eastern Archaeology* 68/3: 114–122.
- . 2010a. Platform Bearers from Kūl-e Farah III and VI. *Iran (Journal of the British Institute of Persian Studies)* 48: 27–41.
- . 2010b. *The Arjan Tomb: at the Crossroads of the Elamite and Persian Empires*. Leuven: Peeters.
- . 2013. Braids of Glory, Elamite Sculptural Reliefs from the Highlands: Kul-e Farah IV. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives*. Ghent: Peeters, 207–248.
- . 2014. Aesthetics of the Natural Environment in the Ancient Near East: the Elamite Rock-cut Sanctuary of Kurangun. In: Feldman, M. and Brown, B. (eds.) *Critical Approaches to Ancient Near Eastern Art*. Berlin: De Gruyter, 741–771.
- . 2015a. A Highland Elamite Archer from Kūl-e Farah IV, CI:4. *Iranica Antiqua* 50: 251–278.
- . 2015b. Platforms of Exaltation, Elamite Sculptural Reliefs from the Highlands: Kūl-e Farah VI. *Elamica* 4: 1–50.
- . forthcoming a. *Monumental Reliefs of the Elamite Highlands*. Eisenbrauns.
- . forthcoming b. Puzur-Inšušinak, last king of Akkad? Text, Image and Context Reconsidered. In: *Elam and its Neighbours*. Proceedings of the 2016 International Congress Held at Johannes Gutenberg University of Mainz (Germany).
- Amiet, P. 1966. *Elam*. Auvers sur Oise: Archée Éditeur.
- . 1970. *L’art d’Agadé au Musée du Louvre*. Paris: Réunion des Musées Nationaux.
- . 1976. Contributions à l’histoire de la sculpture archaïque. *Cahiers de la Délégation archéologique française en Iran* 6: 47–82.

- . 1986. L'âge des échanges inter-iraniens 3500–1700 avant J.-C. Paris: Réunion des Musées Nationaux.
- . 1988. *Suse 6000 ans d'histoire*. Paris: Monographies des musées de France.
- Börker-Klähn, J. 1982. *Alt Vorderasiatische Bildstellen und vergleichbare Felsreliefs*, 2 Vols. Mainz am Rhein: Philipp von Zabern.
- Connan, J. and Deschesne, O. 1996. *Le bitume à Suse: Collection du Musée du Louvre*. Paris: Réunion des Musées Nationaux.
- Harper, P.O., Aruz, J. and Tallon, F. 1992. *The Royal City of Susa: Ancient Near Eastern Treasures in the Louvre*. New York: The Metropolitan Museum of Art.
- Madjidzadeh, Y. 2003. *Jiroft, the Earliest Oriental Civilization*. Tehran: ICHO.
- Miroschedji, P. de. 1973. Vases et objets en steatite susiens du Musée du Louvre. *Cahiers de la Délégation archéologique française en Iran* 3: 9–78.
- . 1981. Le dieu Élamite au serpent et aux eaux jaillissantes. *Iranica Antiqua* 16: 1–25.
- Seidl, U. 1986. *Die Elamischen Felsreliefs von Kurangün und Naqsh-e Rostam*, Iranische Denkmäler 12/II/H. Berlin: Deutsches Archäologisches Institut.
- Spycket, A. 1981. *La Statuaire Du Proche-Orient Ancien*. Leiden: Brill.
- . 1992. *Les figurines de Suse 1: Les figurines humaines; IV-II millénaires av. J.C.* Mémoires de la Délégation en Perse 52. Paris: Gabalda.
- Vanden Berghe, L. 1984. *Reliefs rupestres de l'Iran ancien*. Bruxelles: Musées royaux d'art et d'histoire.

Further Reading

While a comprehensive study of Elamite sculpture is still wanting, the present summary has profited from the important contributions made to this area of studies by Pierre Amiet (1966, 1970, 1976, 1986 and 1988), Pierre de Miroschedji (1973, 1981), Jutta Börker-Klähn (1982), numerous entries dedicated to sculpture in *The Royal City of Susa* (1992) and, most particularly, the work of Agnès Spycket (1981 and 1992). An excellent resource for Elamite bitumen sculpture is provided by Jacques Connan and Odile Deschesne (1996). The present author has also contributed with various publications treating Elamite sculptural art and highland reliefs (Álvarez-Mon 2005, 2010a, 2010b, 2013, 2014, 2015a, 2015b, forthcoming a).

CHAPTER THIRTY-ONE

Glyptic in the 4th–2nd millennium



Enrico Ascalone

Introduction

The history of Elam commences with the appearance of the proto-cuneiform writing system in Susa III (levels 17–16 of the Acropole) and the mention of its name in administrative texts of Urukagina of Lagash around the middle of the 3rd millennium BC. However, widespread evidence of common artistic expressions in glyptic art originating from an Elamite cultural background can already be seen at the beginning of 3rd millennium BC, with a homogenous cultural horizon involving the main political structures of western, central and eastern Iran (see *Proto-Elamite Period*). Seals and sealings were, however, widely known before the Proto-Elamite period and represent one of the most important sources of evidence for the cultural development of the Susiana plain and Iranian highlands.

The first evidence of seals in Iran extends back to the Early Chalcolithic period at Seh Gabi and Tepe Sabz (Kurdistan), when stamp seals exhibit the geometric decoration that would remain a key feature for the entire Chalcolithic period. These same geometric seals were found at Hissar I, where they are generally square in shape, although round and oval versions also occur. To be dated to the same period are the specimens from Tall-i Bakun with crossed lines attested at the end of the Ubaid period. Susa A seals found on the terrace of Susa bear cross-shaped designs very close to the Bakun tradition, and a small number represent humans or animals (generally bovines or goats) ([Figure 31.2a-b](#)). During the end of the 4th millennium BC in the Susa II period (Uruk phase; found in levels 27–17 of the *Acropole*), the themes, styles, iconography and morphology of seals undergo change. This production should be considered contemporary with the glyptic of Uruk IV, with new depictions in a broader scenic field, now representing rows of animals and anthropomorphic beings ([Figure 31.2c-d](#)). A new, widely discussed, production is attested in the so-called Proto-Elamite period, when the first Elamite indicators were incorrectly identified for a long time in the material collected in the same layers of the tablets of the Susa III period (see *Proto-Elamite Period*).

From the last years of the 4th millennium BC it is possible to follow an uninterrupted line of

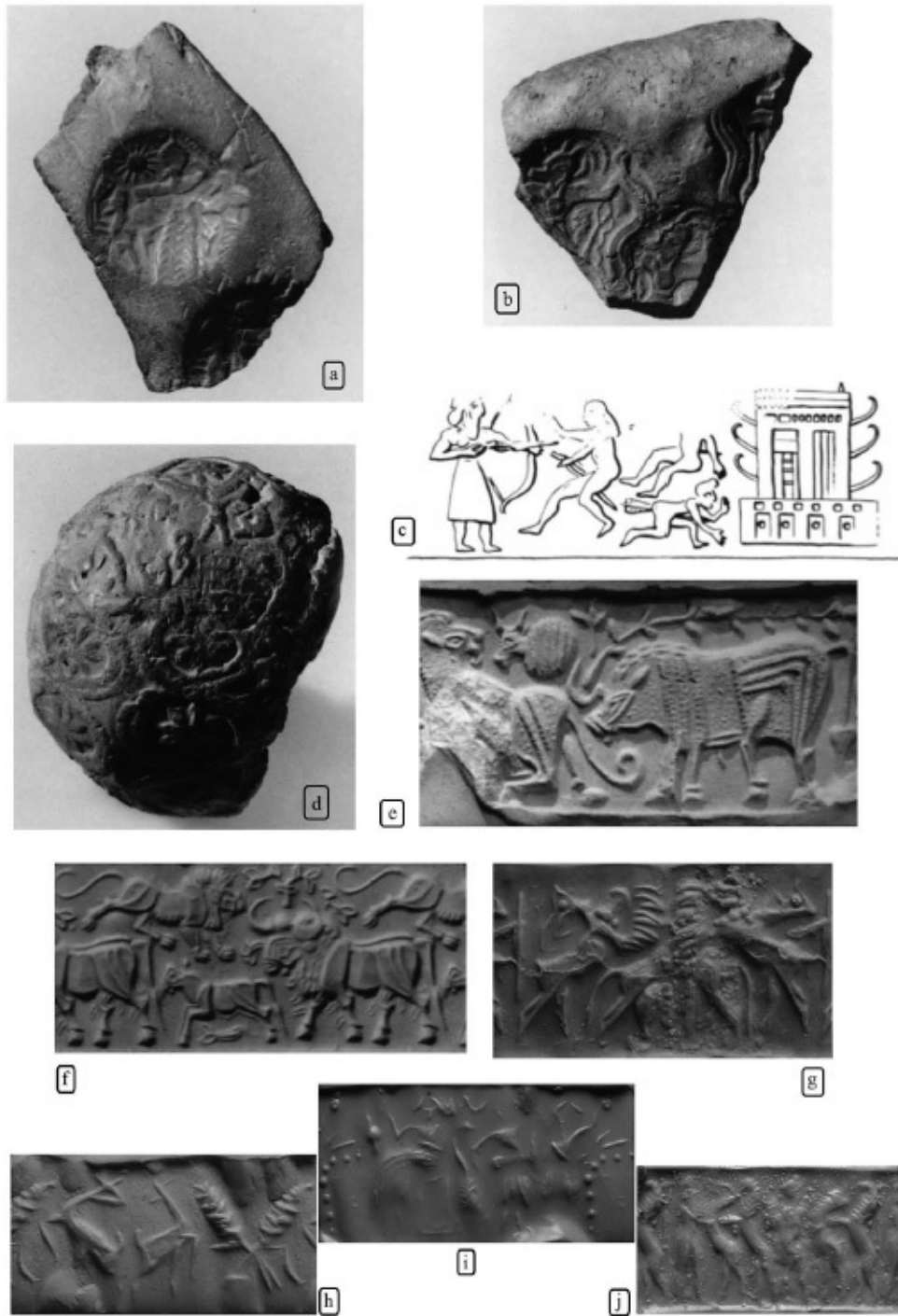


Figure 31.2 [a-b] Susa A seal impressions from Susa after Amiet 1972: nn. 220–231; [c-d] Uruk-type seal impressions from Susa II after Aruz, Harper and Tallon 1992: nn. 22 and 28; [e-f] Proto-Elamite seals from Susa III after Mecquenem 1934: 195, Figure 30: 5 and Amiet 1972: n. 1000; [g-h] Early Dynastic seals (Early group) from Susa IVA after Ascalone 2011: nn. 1A.19–20; [i-j] Early Dynastic seals (Later group) from Susa IVA after Ascalone 2011: nn. 1A.51, 57.

Proto-Elamite period (ca. 3100–2800/ 2700 BC)

After the Uruk phase known in Lower Mesopotamia and Susiana, a new period was born. This Susa III period was identified as ‘Proto-Elamite’, following V. Scheil’s (1900) initial attempt to

create a relationship between a large group of Susa texts bearing seal impressions (approximately 1550) and the later Elamite tablets. The texts were found in levels 16–14b of the *Acropole* and in a limited excavation of the *Ville Royale*, confirming a date around the end of the 4th, and the beginning of 3rd millennium BC. There is no evidence, however, to confirm the purported link with the later Elamite tablets, either linguistically or graphically, and from a figurative and artistic perspective, no continuity is attested between the Proto-Elamite and the Old-Elamite period glyptic in either iconography or in style.

Susa III

The Proto-Elamite chronological sequences at Susa are well known in the third period of the city. The IIIA period has been identified in levels 16–14 of the *Acropole*, levels 18–15 of the *Ville Royale*, and in the Cc and Da stylistic phases of L. Le Breton, while the IIIB phase is attested in layers 14–13 of *Ville Royale* and the Db phase. The same markers of the Proto-Elamite cultural horizon have been found at Tall-i Ghazir, Tall-i Malyan (Middle and Late Banesh), Shahr-i Sokhta I, Tepe Sofalin, Arisman, Tol-e Nurabad, Tepe Siyalk IV, Tepe Hissar, Godin Tepe, Ozbaki, Tepe Yahya (IVC period), Miri Qalat IIIC and Mahtoutabad III.

Proto-Elamite production

During the last years of the Uruk period, a Susian tradition emerged that would be well represented in successive Proto-Elamite corpora ([Figure 31.2e–f](#)). As proposed by H. Pittman (2001), the differences in iconography between the glyptic art of Uruk and Susa could be explained by the types of economic activities at both centres.

The glyptic of this period, widely diffused on the whole Iranian plateau, reproduces in its first developments simplified designs, usually geometric, that could be divided into four main styles: the classic style, the glazed steatite style, the wheel-cut style and the incised style. At Susa, the geometric patterns frequently use lozenges and chevrons, while Pittman's so-called 'Classic Proto-Elamite Style', found in levels 15–14 of the *Acropole*, is related to administrative tablets. In the Classic group, the geometric representation is replaced by animals acting as humans or flanking a stylized mountain with a possible tree at its summit. Depictions of lions attacking goats and cattle continue, and fantastic creatures appear only rarely. The style is vigorous, with each individual personage depicted in good proportion, but the carving appears flat and is still far from the Early Dynastic IIIb renderings.

On the basis of style and iconography, the glazed steatite group can be organised in two main categories, the 'hatched' and the 'Multiple Element' group (Pittman 1980: 129), in which the numerous designs apparently lack any relational sense. Stamp seals attributed to this period are also known at Susa and Tall-i Malyan, where the main representation is geometric,

very close to the contemporary cylinder seal production.

Early-Elamite period (ca. 2800/2700–2300 BC)

The sumerogram NIM, used to denote Elam, appears with certainty in Early Dynastic II and III periods. Its presence is attested in the Sumerian King List, where Elam and Awan are both mentioned in their territorial disputes against Enmebaragesi of Kish and Ur. For these reasons and on the basis of the glyptic documentation in which the seeds of an Elamite iconographic and figurative heritage appear for the first time, it is preferable to identify an Early phase between the Proto-Elamite period and the dynastic history of Elam.

From the end of the first quarter of the 3rd millennium BC, during the pre-Sargonic era, artistic representations from Mesopotamian workshops are unknown. Between the Proto-Elamite expressions and the appearance of the first evidence of iconographic and stylistic traits rooted in Elamite cultural heritage, Susian glyptic production is very close to that of the contemporary Mesopotamian ateliers. Simultaneously, to the east in the Jiroft valley, a new glyptic art is well represented in the recent excavations carried out by Y. Madjidzadeh (2008) at Konar Sandal South, close to the Early Dynastic III phase but with peculiar artistic features that would be adopted in the next period in the Early South-Eastern Iranian production (see *Early South-Eastern Iranian production*).

Susa IVA

The IVA period at Susa is known in layers 4–3 of the *Acropole* and 12–9 of the *Ville Royale*. It was also identified in the Dc/d stylistic phase of Louis Le Breton (1957) and in the so-called ‘XXV siècle’ by R. de Mecquenem (1934). The glyptic of Susa shows a strong homogeneity with the corpora from Mesopotamia, further confirming the cultural alternation of the Susiana plain throughout its history. Only a few specimens reveal figurative details that probably originated in the highlands. In a more generic analysis we should assume that the whole corpus of Susa IVA is unrelated to the earlier Proto-Elamite production and is best regarded as emerging from a different workshop to the Mesopotamian glyptic art, as well as Fara, Kish, Ur, Lagash and the sites of the Diyala region.

Early Dynastic production (ca. 2600–2300 BC)

The Susa IVA glyptic should be considered a different expression from the Mesopotamian production dated to the Early Dynastic III period, allowing for the identification of at least two main groups of seals: (i) an early group that shows comparisons with Fara (Imdugud-sukkurru phase), Kish A, Diyala (ED IIIa) and royal tombs of Ur (Meskalamdug period) seals ([Figure](#)

[31.2g-h](#)); and (ii) a later group with relations in the Ur I (Mesanepada) and Lagash (Lugalanda) corpora ([Figure 31.2i-j](#)).

The early and late productions seem to be represented by a corpus of seals mainly coming from Susa, although seals from Luristan (two from Bani Surmah and Kalleh Nissar) were also found. Only six seals were published in well-stratified contexts; except for the specimen found in the level 4a of the *Ville Royale I* dated to the Susa V period, all the other seals were found in Early Dynastic archaeological contexts. The early glyptic of Susa IVA follows the 'pyramid scheme' known from Mesopotamian productions but with a flatter and less voluminous stylistic representation than the one observed in the Ur and Diyala workshops. During the early phase, the principal theme in the 'figure-band' is that of lions attacking antelopes/cervids, with or without a naked human figure. In the last years of the Early Dynastic period and in the later layers of Susa IVA, new artistic expressions are apparent in the adoption of subjects and icons such as banquet scenes, heraldic representations, building themes and the god-ship. From a stylistic point of view, the new seals show a more volumetric character, care for details and partial reduction of personages with a centripetal reading of the scene, which overcomes the continuous frieze of the 'figure-band' type. The last specimens of this period seem to introduce a new vision of the seal's space that would be widely developed by the Akkadian workshops, confirming a historical continuity in the cultural sequences of the Susiana plain and its main site.

Konar Sandal production (ca. 2500/2400–2300 BC)

A group of seals and sealings were found in the Jiroft valley at Konar Sandal where a new civilization has been identified in recent years by Iranian excavations conducted under the direction of Y. Madjidzadeh. Most of the sealings came from Trench III, and they should be regarded as local productions that can contribute to the understanding of the chronology of Konar Sandal South.¹ The sealings show iconographic traits close to the Mesopotamian repertory in which the figurative apparatus is more chaotic, within a dynamic figurative structure. At the same time, the square stamp sealings found in Konar Sandal South should be considered an artistic expression of south-eastern Iranian culture. This early group of glyptic is close to the successive productions defined as 'South-East Iranian' by the author ([Figure 31.3a-d](#), see also *Early South-Eastern Iranian production* and *Late South-Eastern Iranian production*).

Old-Elamite I Period (ca. 2300–2100 BC)

From an artistic point of view, a truly Elamite period begins with the appearance of iconographic and stylistic traits associated with the Elamite dynasty of Awan. During this time

new motifs, themes and styles appear in the glyptic art of Susa, including seals and sealings found in the *Ville Royale* bearing official inscriptions of Awanite kings. During the Akkadian control of Susiana, the rulers of Susa, presumably influenced by an Elamite highland heritage, were able to formulate original artistic solutions, not yet standardized and encoded, that would be widely used during the Simashki and especially the Sukkalmakh dynasty, when glyptic art was incorporated into a propagandistic figurative agenda.

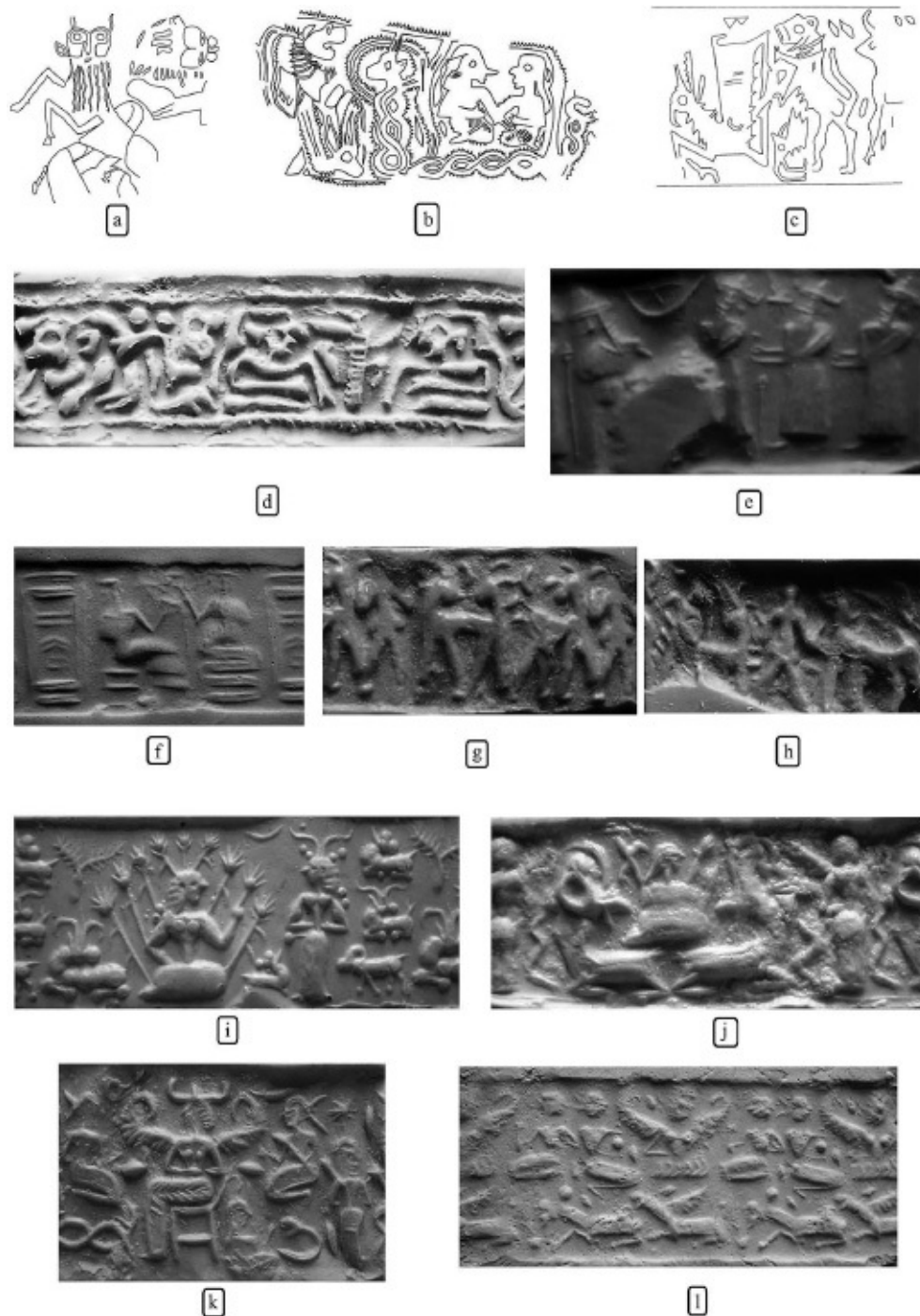


Figure 31.3 [a-c] Konar Sandal sealings after Pittman 2008: Figs. 29b, 30 g and 32a; [d] Seal from Shahdad after Ascalone 2011: n. 4A.2; [e-f] Awanite seals from Susa IVB after Ascalone 2011: nn. 1B.164, 150; [g-h] Piedmont seals from Susa IVB after Ascalone 2011: nn. 5.20, 23; [i-j] Early South-Eastern Iranian seals from Shahdad after Ascalone 2011: nn. 4B.1-2; [k]

Susa IVB and VA

The Susa IVB and VA periods are well represented in levels 8–5 of the *Ville Royale*, in the B VII period of R. Ghirshman on the *Ville Royale* (only Susa VA), in layers 2–1 of the *Acropole* (for Susa IVB) and in the De typological phases of Louis Le Breton. The main corpus of seals follows the iconographic, thematic and stylistic features of the Akkadian period, although in some cases with a figurative expression rooted in the Susian-Elamite cultural background. In addition, it is possible to recognize two other productions that, while influenced by contemporary Akkadian glyptic, are autonomous in their iconographic and stylistic traits: (i) an Awanite group (ca. 2350–2150 BC) ([Figure 31.3e-f](#)); and a (ii) Piedmont group (ca. 2400–2200 BC) ([Figure 31.3g-h](#)).

Awanite group in the Akkadian workshops at Susa (ca. 2350–2150 BC)

In the wide and homogeneous Akkadian production of Susa seals, we can identify a single locally manufactured group influenced by the highland cultural heritage in style and iconography ([Figure 31.3e-f](#)). Although an Elamite, or somewhat similar, production is recognizable only at the end of the 3rd millennium BC during the Simaskhi dynasty (compare with *Old-Elamite II-III production*), it is in this period that some peculiar stylistic and iconographic aspects (known later in Elamite glyptic art) appear for the first time. Compared to the Akkadian glyptic, the style is less volumetric, with reduced plasticity. The representation is more schematic, with less attention given to details; often recalling the Early Dynastic III productions. The themes, including mythological scenes, are unknown in the Akkadian corpus and are instead strongly rooted in the Iranian highland cultural heritage. At the same time, Susian workshops seem to adopt new Elamite motifs such as the god-snake (later revised by the Old-Elamite stone-cutters), the worshipper or high functionary with crossed arms before a god, the figure with ears of corn sprouting from the shoulders, the goat with human head and the typical flat tiara of the successive Elamite production. The seal of Epirmupi, for example, shows traits unknown to the classicism of the Akkadian style; in detail the long hair on the shoulders of the main figure finds its closest relations in the contemporary production of south-eastern Iran, known in the Konar Sandal, Gonur, Susa and Shahdad figurative art.

Piedmont production (ca. 2400–2200 BC)

Incorrectly defined in the past as Gutian (Frankfort 1955: 33–34),² one group of seals should be

regarded as a piedmont production for its geographical diffusion in the areas very close to the Zagros-Taurus mountains and in Luristan province ([Figure 31.3g-h](#)). These seals were found at Susa, Kamtarlan II, Kalleh Nissar, Sorkh Dom-i Luri and Tepe Giyan, but also at sites outside Iran, such as Ur, Tell Asmar, Tell Brak, Kish, Tell Suleimeh and Assur. The archaeological contexts of the above seals in the Diyala region allow for the suggestion of a timeline between 2400 and 2200 BC (slightly higher than the chronological evaluations of Amiet 1972: 192). The style appears coarse, with a small notch that reduces expression and clarity. The themes depicted are homogeneous, mainly concentrating on the hero in combat with a mythological double-headed being, replacing the figures of the Akkadian tradition such as lions and/or antelopes.

Early South-Eastern Iranian production (ca. 2300–2200/2100 BC) (Takab III2; Yahya IVC1-IVB)

After the earlier Konar Sandal production, a new glyptic art emerges in the Halil valley and more generally in south-eastern Iran,³ involving Shahdad, a gateway city lying between the Oxus and the Jiroft civilisations. This group of seals can be divided into an early corpus, close to the Konar Sandal South workshops⁴ and chlorite vessel manufacture, and a later corpus dating to the end of the 3rd and the beginning of the 2nd millennium BC (I return to this issue in *Late South-Eastern Iranian production*): (i) Early group (ca. 2300–2200/2100 BC) ([Figure 31.3i-l](#)); (ii) Late group (ca. 2200/2100–1900/1800 BC) (see *Late South-Eastern Iranian production* and Figure 31.6a-d).

Dated between the third and fourth quarter of the 3rd millennium BC, the seals of this period show a balanced division of space with more order and accuracy than the earlier Konar Sandal production (compare with *Susa IVA*). The figures are now depicted with greater attention to detail, in some cases oriented towards a new realistic expression in which the musculature of each individual figure is well treated. At the same time, the chaotic representation of the previous period is left behind in favour of a symmetrical and balanced division of the space. The style seems to be homogenous, with some comparisons with classical Akkadian glyptic art, particularly in the significant use of volumetric figures; not a few specimens show the use of the drill that would be a specific feature of south-eastern Iranian glyptic until the end of its production around 1900/1800 BC. The figures fill the entire scene, usually mythological in subject, in which a god and goddess without tiaras or other identifying symbols⁵ represent the most important personages. The winged goddess, the goddess in her fertile and cosmic appearances and the god/goddess with snakes seem to play an especially important role in the south-eastern Iranian pantheon.

After the Proto-Elamite and Konar Sandal productions, the glyptic art of central/eastern Iran shows for the first time an indigenous development without any cultural intrusion in the

formation of its figurative and stylistic heritage. If the Proto-Elamite ‘phenomenon’ seems to have originated in western Iran and the Konar Sandal workshops (Trench III) follow the contemporary artistic and figurative expressions of the Early Dynastic III period in Mesopotamia (see *Susa IVA*), the Early phase of the South-Eastern Iranian glyptic represents the earlier production of seals strongly rooted in the cultural reservoir of central and eastern Iran. This production is attributable to the Yahya IVC1-IVB and Takab III2 periods, contemporary with Shahr-i Sokhta III in the Hilmand valley, Miri Qalat IV in the Makran region, Adjī Kui 1–2A (Namazga V) in the Oxus area and, finally, Harappa 3A-B in the Indus valley.

Old-Elamite II-III Period (ca. 2100–1520 BC)

During the Simashki and Sukkalmakh sovereignty, a radical change is attested in the official figurative codes of the ruling class. There is evidence of an independent production, very close to the Elamite world, and a major effort focussed on dynastic celebration. This effort is attested in the new titles of the Elamite kings, in the appearance of dynastic inscriptions, in the correspondences between rock art and iconographic expressions on seals and in the numerous religious buildings and consolidation of a divine pantheon under the hegemony of the divine couple Napirisha and Kiririsha. It seems that the first Sukkalmakh sovereigns began a new official program in which standardised figurative codes were used to celebrate the dynasty and the unity of the reign (Ascalone 2011). In this period, a wide diffusion of royal inscriptions is attested on seals after their sporadic occurrences in the Awan glyptic art (see Epirmupi, Eshpum and later Puzur-Inshushinak seals). Dynastic official seals such as those of Kindattu, Tan-Ruhurater, Idadu, Ebarat, Attahushu, Palaishshan, Kuk-Kirmash, Tetepmada (?), Temti-Agun, Tan-Uli and Kuk-Nashur should be considered closely associated with the monumental displays of royal imagery exhibited in the Kurangun and Naqsh-e Rostam reliefs.

Susa VB and Kaftari period (Simashki and Sukkalmakh dynasties)

It is only quite recently that an autonomous and independent Elamite glyptic art has been identified in the evidence coming from Tall-e Malyan and Susa, where a large number of bituminous seals, also called ‘*populaire*’ (Amiet 1972: 239), were found (Anshanite group).⁶ However, a full identification of an Anshanite glyptic art remains difficult due to scanty knowledge of archaeological contexts and the limited excavations carried out in the Fars region.

In this same period of Anshanite production, a new artistic expression was produced by the Elamite workshops (Old-Elamite group), different from the contemporary Anshanite glyptic but originating from the same Elamite cultural context (see *Old-Elamite II-III production*). A

group of around 200 Old-Elamite seals should be regarded as having an Elamite cultural heritage due to their iconographic, stylistic and thematic divergences from the Mesopotamian and Anshanite seals, their strong iconographic relations with Elamite figurative art and finally, for the presence of a broad Elamite onomastic.

Old-Elamite II-III production (ca. 2100–1520 BC)

The knowledge of Old-Elamite glyptic art at Susa enables the identification of a new artistic production very closely related to that of contemporary Mesopotamia in themes and style but with specific iconographic links to the Anshanite seal group. On this basis we can support the presence of an autonomous art, influenced by its dual cultural personality, with an internal stylistic division and four main historical and cultural phases of production: (i) Old-Elamite II. Early Phase (ca. 2031–1920/1900 BC) ([Figure 31.4a-b](#)); (ii) Old-Elamite IIIA. Transitional Phase (ca. 1920/1900–1800 BC) ([Figure 31.4c-d](#)); (iii) Old-Elamite IIIB. Classic Phase (ca. 1800–1650 BC) ([Figure 31.4e-f](#)); (iv) Old-Elamite IIIC. Late Phase (ca. 1650–1520 BC) ([Figure 31.4g-h](#)).

The development of the Old-Elamite glyptic phases is well supported by the royal inscriptions on the seals, although sometimes correspondences with names, such Ebarat or Idadu, present interpretive challenges. The Early phase of Old-Elamite II-III production is related to the Simashki workshops (ca. 2031–1920/1900 BC), while the three later phases belong to the Sukkalmakh period, showing a long process of development of Elamite figurative heritage (ca. 1900–1520 BC). Only with the Sukkalmakh sovereigns, coinciding with a period of maximum geographic expansion, would a new artistic base finally be established. After a first transitional phase (ca. 1900–1800 BC), very close to the iconographic models of the Simashki period, glyptic art seems to become part of a propaganda program that the Sukkalmakh regency developed within the framework of a wider political strategy (ca. 1800–1650 BC). The creation of an artistic identity imposed new figurative and iconographic codes that would be widely used by Sirukutuh onwards. Like Simashki dynasty glyptic, the Sukkalmakh glyptic was influenced by contemporary Mesopotamian figurative development, although a repetitive and systematic use of Elamite iconographies was encoded and new emphasis was placed on more detailed representations and volumetric styles.

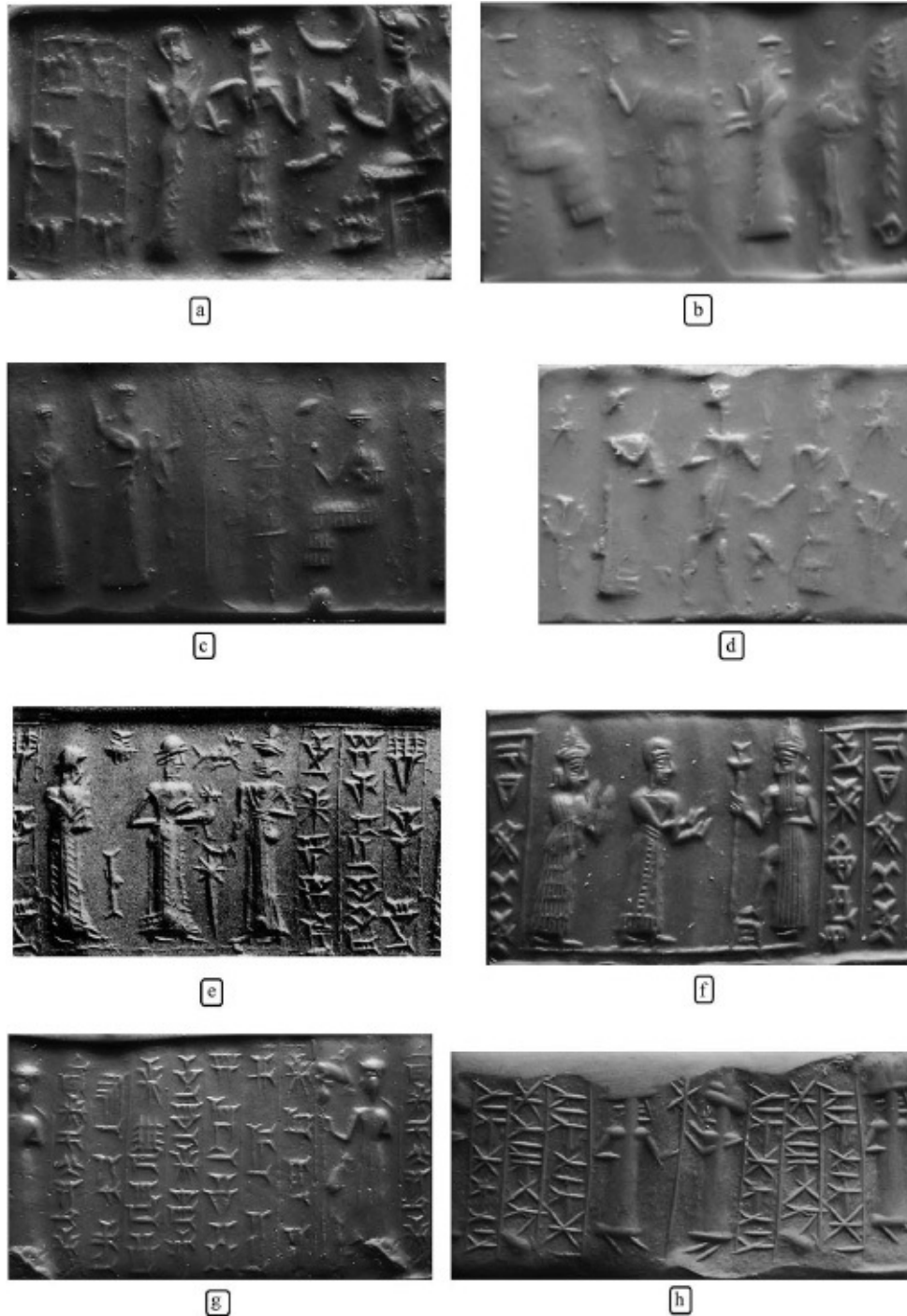


Figure 31.4 [a-b] Early Old-Elamite seals from Susa after Ascalone 2011: nn. 2A.8, 37; [c] Transitional Old-Elamite seal from ex Pahlavi Collection after Ascalone 2011: n. 2B.10; [d] Transitional Old-Elamite seal from Susa after Ascalone 2011: n. 2B.15; [e-f] Classic Old-Elamite seals from Susa after Ascalone 2011: nn. 2B.28, 52; [g] Late Old-Elamite seal from ex Mazda Collection after Ascalone 2011: n. 2B.145; [h] Late Old-Elamite seal from ex Pahlavi Collection after Ascalone 2011: n. 2B.147.

Old-Elamite II: the early phase (ca. 2031–1920/1900 BC)

This group is strongly homogenous in style, iconography and themes, with clear Neo-

Sumerian/Old-Babylonian influences in an indigenous cultural background. The style is generally very close to the Mesopotamian contemporary glyptic art, although with widespread inaccuracies, low plasticity and a wide presence of specific motifs clearly rooted in the Elamite cultural reservoir (see in particular the slightly angular moon, the flat tiara and the crossed arms of the standing figure). Under the Simashki dynasty, a class of seals distinct from the Mesopotamian tradition was systematically developed for the first time, not always successfully, in order to create a new artistic identity. The transition to the new Sukkalmakh dynasty seems to have been rather gradual, and its sovereigns actively incorporated the Simashki heritage, making considerable effort to devise, in a systematic way, a new propaganda code related to their Elamite origins.

Old-Elamite IIIA: the transitional phase (ca. 1920/1900–1800 BC)

The glyptic of the first years of Sukkalmakh period seems to be deeply influenced by previous Simashkian art. The style is very close to the Mesopotamian workshops, although a clear Elamite production can be identified. This production appears to be a transition between Simashki glyptic art and the mature elaborations of the Classic Phase. From a stylistic point of view, the seals follow a double cultural path. The verticality of the figures, an equitable distribution of space and a static vision of representation resulted in an overall heavy and repetitive depiction. The small size of the personages, the uncertain proportions, the flat volume of the images and the sharp line of the figures are all very close to the contemporary Anshanite corpus of seals and to the earlier Simashki production; the themes are repetitive, although with unimaginable variability when compared with the previous period.⁷

Old-Elamite IIIB: the classic phase (ca. 1800–1650 BC)

The new iconography and style that commenced in the previous period would be widely diffused on seals of Sirukutuh's reign. This classic or mature phase of Sukkalmakh glyptic art is defined by an Elamite identity and follows the new political claims of the Elamite sovereigns, now oriented towards the west, also attested in the Mari texts dating to the Zimri-Lim regency. The style of this group identifies a dynastic production with clearly defined Elamite figurative codes and a manufacturing in which provincial workshops or unofficial stone-cutting ateliers are presumably to be recognised. Contemporary with the political vicissitudes of the Sukkalmakh dynasty in the second half of the 17th century BC, a change in the style of the Elamite glyptic is documented by a group of seals that should be assigned to a late phase of development.

Old-Elamite IIIC: the late phase (ca. 1650–1520 BC)

The Old-Elamite glyptic art of the final years of the Sukkalmakh dynasty shows iconographic and stylistic solutions very close to the previous phase, although with a more accentuated stylization and new standardization of figures. The themes are the same as the Classic phase, but the style is rougher and less attention is given to iconographic details. Two main groups of production can be recognized: an earlier group still tied to the previous tradition, and a later group probably dating to the 16th century BC. An exaggerated stylization is now present, and a loss of Elamite iconographic heritage is attested in scenes in which clarity prevails over narration. The themes are the same as the previous period, now canonized, with a recovery of the more archaic presentation scene in front of a seated god. At the same time, new motifs appear, as well as the row of schematic human beings on the whole surface of seal. The subjects of Elamite glyptic art during the last years of Sukkalmakh regency seem to follow the developments of the Kassite workshops in Mesopotamia, while the style and iconographic traits belong to an Elamite cultural background.

Anshanite production (ca. 2100–1700 BC)

Simultaneous to the Old-Elamite production, a new glyptic art was produced in the Simashki and Sukkalmakh periods ([Figure 31.5](#)). Although the seals belonging to this group were mainly found at Susa, and far fewer were from Tall-i Malyan (Anshan), they are generally called 'Anshanite' to underline their relation with the core of the Elamite reign. This production shows new stylistic and iconographic traits that could be recognized in a simple and repetitive epigraphic formula, in a lengthening of the figures, a generic deleting of the iconographic details, a rough character and a strong stylization of the motifs, which show close relations with Old-Assyrian and Cappadocian glyptic art. The iconographic innovations on the standard presentation scene can be mainly recognized in the elimination of the introductory figure, the absence of the tiara on the receiving god/king seated on the throne, the depiction of the personages with the typical 'Elamite hairstyle' and the posture of the worshiper or high official with arms outstretched as well as crossed.

The chronological limits of this production are not clear, but certain evaluations can be made:

- (1) Seventeen Anshanite seals were found at Susa by Jacques de Morgan on the *Acropole* in the foundation of the Inshushinak temple (Ur III period), two in the Donjon, three by Roland de Mecquenem in the graves of the *Ville Royale* contemporary to the BV Roman Ghirshman layers, dating to the last years of the 20th and 19th century BC. A single seal was found by R. de Mecquenem in a grave of the 'XXIII siècle' in archaeological association with Ur III materials;

- (2) The Anshanite seals from Tall-i Malyan were found in the Kaftari period, approximately dated to 2300/2200–1800/1700 BC (Ascalone 2015);
- (3) Anshanite seals were found in the Neo-Sumerian and Isin/Larsa layers of the Diyala region;
- (4) One Cappadocian seal found at Susa and dated to the Kültepe II period (ca. 1970–1835 BC) has been found in archaeological association with many other Anshanite seals;
- (5) There are strong comparisons between Anshanite seals and the glyptic of Kültepe II which do not extend chronologically beyond the 19th century BC;
- (6) The themes on seals are very close to the Neo-Sumerian tradition, successively converged in the Isin and Larsa artistic expressions;
- (7) The rough character of Anshanite seals finds important comparisons with several Susian seals dated to the end of the 3rd millennium BC;
- (8) Some seals dating to the Simashki dynasty have very close relations in style and iconography with the Anshanite corpus;
- (9) One seal bears an inscription of Palaishshan.

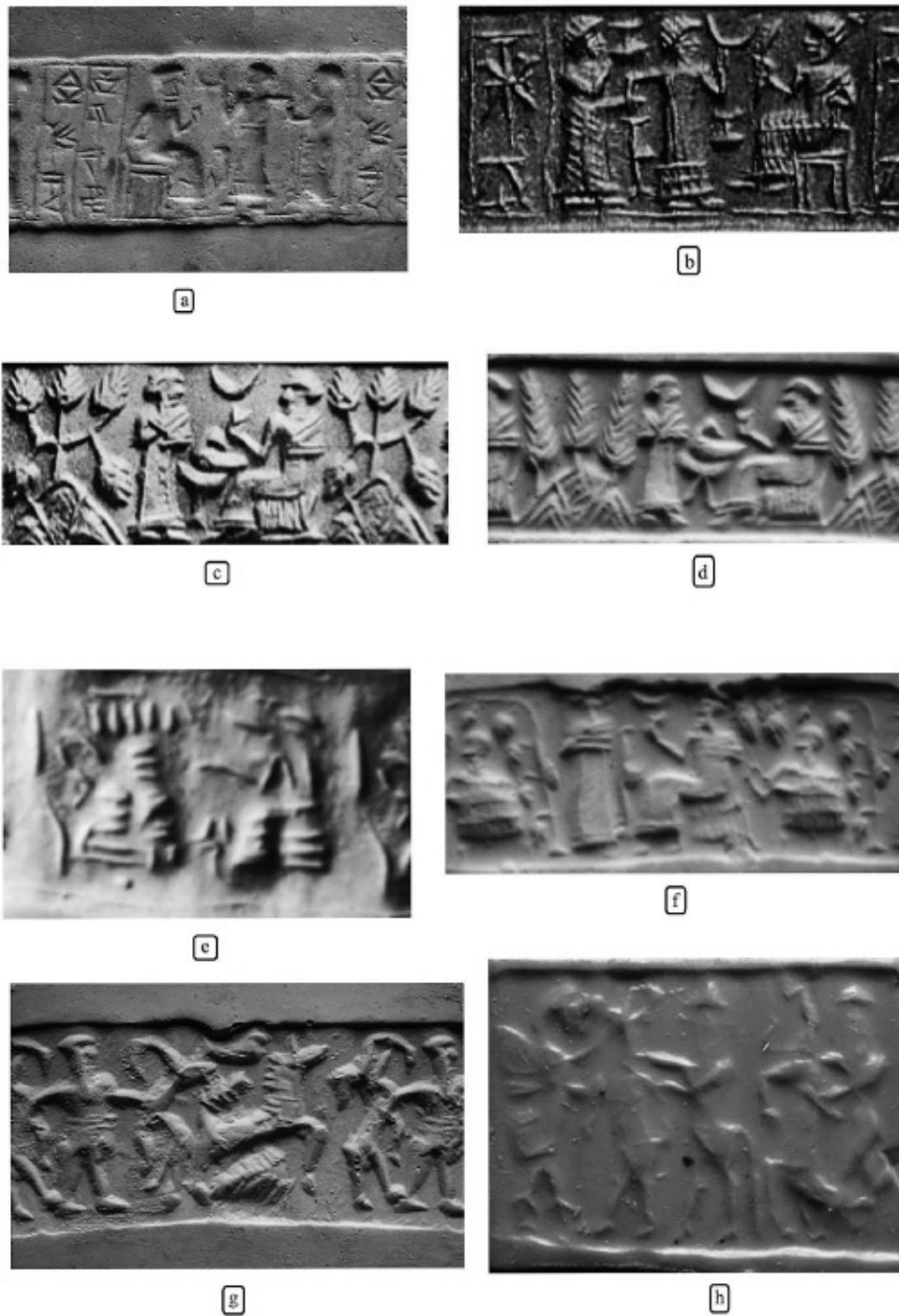


Figure 31.5 [a] Early Anshanite seal from Susa after Amiet 1972: n. 1687; [b] Early Anshanite seal from Private Collection after Ascalone 2011: n. 3A.4; [c-d] Classic Anshanite seals from Susa after Amiet 1972: nn. 1895, 1890; [e] 'Eastern' Anshanite seals from Susa after Ascalone 2011: n. 3B.221; [f] 'Eastern' Anshanite seals from Choga Mish after Ascalone 2011: n. 3B.229; [g-h] Late Anshanite seal from Susa after Ascalone 2011: nn. 3C.4, 21.

On the basis of the above comparisons and the identification of an internal stylistic line of development, four main groups in the Anshanite corpus of seals may be recognized: (i) Early group (ca. 2100–2000 BC) ([Figure 31.5a-b](#)); (ii) Classic group (ca. 2000–1800 BC) ([Figure 31.5c-d](#)); (iii) Late group (ca. 1800–1700 BC) ([Figure 31.5g-h](#)); (iv) 'Eastern group (ca. 2100–1800 BC)

([Figure 31.5e-f](#)).

The so-called 'Eastern' group appears particularly significant for its historical value related to the integrative cultural dynamics of Elam during the end of 3rd, and the beginning of the 2nd millennium BC. The chronological proposal for this group should be slightly older on the basis of iconographic and figurative comparisons, with silver beakers and Neo-Sumerian repertory dated to the last years of the 3rd millennium BC, and the Bactrian statuettes, the iconographies on the Shahdad standard and South-Eastern Iranian cylinder seals group dating to the end of 3rd/beginning of the 2nd millennium BC. The above comparisons might allow us to define generically this group as an eastern production due to its wide diffusion in the figurative art of the eastern Iranian plateau and Oxus civilisation.

Late South-Eastern Iranian production (ca. 2200/ 2100–1900/1800 BC) (Takab III1; Yahya IVA; Gonur Phase)

A later production of seals in south-eastern Iran is represented in the archaeological contexts of Gonur, Tepe Yahya and Tôd. The Gonur seals were respectively found in a grave of Gonur North dated to the last century of the 3rd millennium BC (ca. 2100–2000 BC) and in the so-called '*temples des sacrifices*', dated to the 'Gonur phase'. The seal excavated in the Yahya IVA period was found in the area BW TT5–7 during the 1969 campaign, in the Second Building Level of the northern step trench of excavation. It is to be attributed to the same chronological time span, contemporary with the Takab III1, Shahr-i Sokhta IV, Shortugai III-IV and Harappa 3C, in a period marked by the occupational shift of the Konar Sandal South settlement. Finally, the seal from Tôd (south of Luxor) was in a hoard found in the Mont temple foundations with an inscription of Amenemhat II (ca. 1929–1895 BC).

Iconographic and stylistic analysis support a later development of south-eastern Iranian glyptic art, unknown, however, in the Konar Sandal South excavations ([Figure 31.6a-d](#)). This group of seals seems to lose the richness of the previous period, with the scene now characterized by the opposition of two main personages with a scant presence of secondary icons. The figurative schematics are rigid, sterile, in some cases expressionless, with calibrated stereotyped figures. The new seals lack the descriptive vivacity of the Early period (see *Early South-Eastern Iranian production*). The main depiction reproduces two deities sitting cross legged, generally female, respectively winged and with ears of corn sprouting from the shoulders. The goddess with ears of corn⁸ was depicted in the Early phase of production at Shahdad, while the winged female appears in more chaotic representations of the previous group at Yahya (found in the so-called 'Persian Gulf room' attributed to the IVB period of the site), Shahdad, Jalalabad and in a specimen of the Rabenou collection. Both deities seem to be depicted in the Gonur seal, where they are standing in front of a seated and horned divinity enclosed in the solar circle.

The Late phase of South-Eastern Iranian seals represents the last line of development of the eastern Iranian glyptic art. A wide crisis in eastern Iran seems to have put an end to the whole cultural complex as attested in south-eastern Iran after the IVA archaeological phase of the Tepe Yahya excavations, at Shahdad III¹ in the Takab plain, in the Hilmand valley (after the end of IV period of Shahr-i Sokhta), at Miri Qalat IV (Makran coast), at Gonur South, Shortugai IV and in the Indus civilization.

Turanian² production (ca. 3500–1500 BC)

This production is known in the Elamite world by two seals found in Susiana and by a scanty presence in the western Iranian highland ([Figure 31.6e](#)). This group of seals, mostly in bronze, was evidently a specific production of the Oxus civilization¹⁰ and its neighbouring areas, represented by the Sistan valley and the Gorgan plain. Outside the main context of their production, these seals were sporadically found at Susa (2), Mari, Tepe Yahya (1 from IVB period), Konar Sandal (4), Bampur (1 from Bampur IV), Damin (2), Shah-i Tump (1) and Mohenjo-daro (1), showing the penetrative force of the Oxus civilization in foreign cultural contexts. Different evaluations have to be made for seals coming from Shahdad, Shahr-i Sokhta (mainly from II and III periods), Mundigak (1 from II-2, 2 from III-4, 4 from III-5, 34 from III-6 and 1 from IV-1 periods) and Tepe Hissar (12 from II and 11 from III periods). All of these sites can be placed within an indigenous cultural complex but with strong influences coming from the core of the Oxus civilization.

Intercultural productions

One group of seals should be considered a separate typological class manifesting a confluence of different cultures. These ‘intercultural’ seals have heterogeneous styles, iconography and, sometimes, epigraphy. We can recognize in the highlands and lowlands of Iran the following intercultural specimens:

- Two pseudo-Indus cylinder seals (ca. 2200–2000 BC) ([Figure 31.6f-g](#));
- One South-Eastern Iranian-Bactrian-Harappan handled stamp-cylinder seal (ca. 2300–2200 BC) ([Figure 31.6h](#));
- Two Anshanite-Dilmunite cylinder seals (ca. 2000–1800 BC) ([Figure 31.6i-j](#));
- Three Elamite-Indus rounded stamp seals (ca. 2200–2000 BC) ([Figure 31.6k-m](#));
- One Persian Gulf type seal (ca. 2200–2000 BC) ([Figure 31.6n](#));
- Three South-Eastern Iranian-Margiana seals or amulets (ca. 2100/2000–1900/1800 BC) ([Figure 31.7a-c](#));
- Five South-Eastern Iranian-Margiana (handled) stamp seals (ca. 2200–2000/1900 BC)

([Figure 31.7d-h](#));

- Six Anshanite-Dilmunite rounded stamp seals (ca. 2000–1800 BC) ([Figure 31.7i-n](#)).

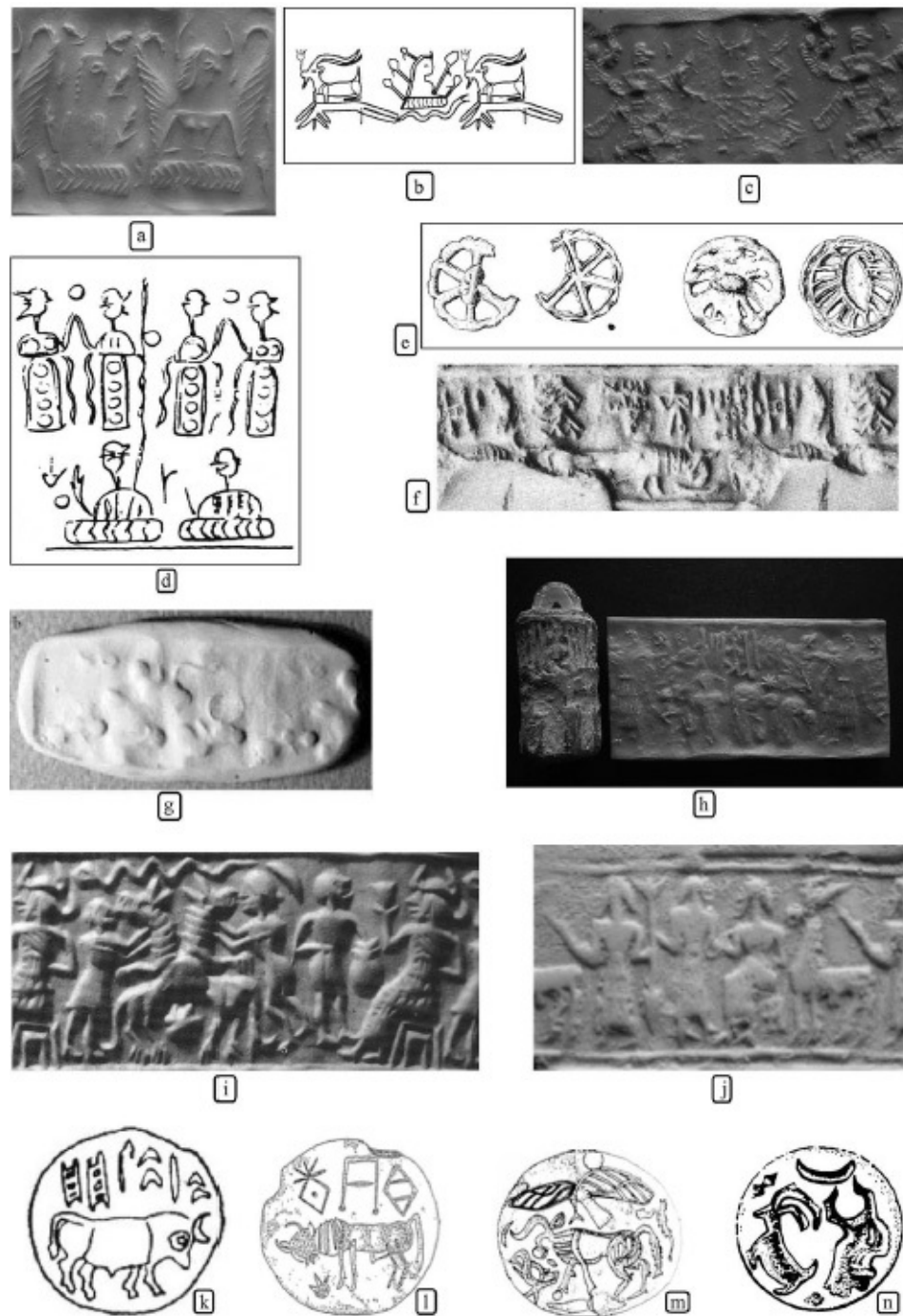


Figure 31.6 [a] Late South-Eastern Iranian seal from Tepe Yahya after Ascalone 2011: n. 4B.8; [b] Late South-Eastern Iranian seal from Gonur depe after Ascalone 2011: n. 4B.17; [c] Late South-Eastern Iranian seal from Susa after Ascalone 2011: n. 4B.19; [d] Late South-Eastern Iranian seal from Tôd after Ascalone 2011: n. 4B.22; [e] Compartmented bronze stamp seals from Susa after Tallon 1987: nn. 1249–1250; [f] Pseudo-Indus cylinder seal from Susa Amiet 1972: n. 1643; [g] Pseudo-Indus cylinder seal from Konar Sandal South after Pittman 2013: Figure 4.12; [h] South-Eastern Iranian-Bactrian-Harappan handled stamp-cylinder seal from Jalalabad after Ascalone 2011: n. 6B; [i-j] Anshanite-Dilmunite cylinder seals from Susa after Ascalone 2011: nn. 8.1–2; [k-m] Elamite-Indus rounded stamp seals after Ascalone 2011: nn. 9.1–3; [n] Persian Gulf type

These seals are the expression of cultural interactions on the Iranian plateau and its coastal areas during the end of the 3rd, and the beginning of the 2nd millennium BC. In particular, it seems possible to identify the role of the Elamite/Anshanite culture in the Persian Gulf glyptic production, generally considered a local manufacturing influenced by Mesopotamian workshops (see, for example, the Anshanite-Dilmunite cylinder seals from Susa). At the same time, they allow for a more substantial analysis of the Integrative Cultural System (ICS)¹¹ among the Indus, Oxus, Elamite and Jiroft civilizations between ca. 2500–1800 BC.

Middle-Elamite period (ca. 1520–1100 BC)

The Sukkalmakh sovereigns were followed by the Middle-Elamite dynasties, the sequence of which forms the basis for a division of the period into three main phases. The first phase (ca. 1500–1400 BC) is notable for the foundation of Haft Tepe (ancient Kabnak) by Tepti-ahar; the second phase (ca. 1400–1200 BC) was marked by the foundation of a new urban complex at Choga Zanbil (Dur-Untash) by Untash-Napirisha, while the third and last phase (ca. 1200–1100 BC) saw the rise of Shutruk-Nakhunte, who subdued his western neighbours. Throughout this period Anshan and Susa provide wide evidence of occupation, as is attested in the archaeological finds of Tall-i Malyan and in the archaeological sequence of the Susa VII and VIII periods.

In glyptic art, a change from the Old-Elamite productions is attested. A new strong stylization of figures and an enrichment of symbols and secondary elements are now documented. The main corpora of seals come from Haft Tepe¹² and Choga Zanbil;¹³ two sites that are particularly meaningful owing to their limited chronological framework. At least five Middle-Elamite groups can be identified ([Figure 31.8](#)): (i) Middle-Elamite Early group (Middle-Elamite I); (ii) Mitannian group (Middle-Elamite I-II); (iii) Middle-Elamite or Linear Style group (Middle-Elamite II-III); (iv) Middle-Assyrian group (Middle-Elamite II-III); (v) Pseudo-Kassite group (Middle-Elamite I-II).



Figure 31.7 [a] South-Eastern Iranian-Margiana seal/amulet from Tepe Yahya after Ascalone 2011: n. 14.1; [b] South-Eastern Iranian-Margiana seal/amulet from Susa after Amiet 1972: n. 1721; [c] South-Eastern Iranian-Margiana seal/amulet from antiquary market after Ascalone 2011: n. 14.3; [d] South-Eastern Iranian-Margiana handled stamp seal from Tepe Yahya after Ascalone 2011: n. 10.1; [e-f] South-Eastern Iranian-Margiana handled stamp seals from Shahdad after Ascalone 2011: nn. 10.2-3; [g] South-Eastern Iranian-Margiana handled stamp seal from Tepe Giyan after Ascalone 2011: n. 10.4; [h] Konar Sandal seal from Trench V after Pittman 2013: Figure 4.7; [i-n] Anshanite-Dilmunite rounded stamp seals from Susa after Amiet 1972: nn. 1720, 1722-1726.

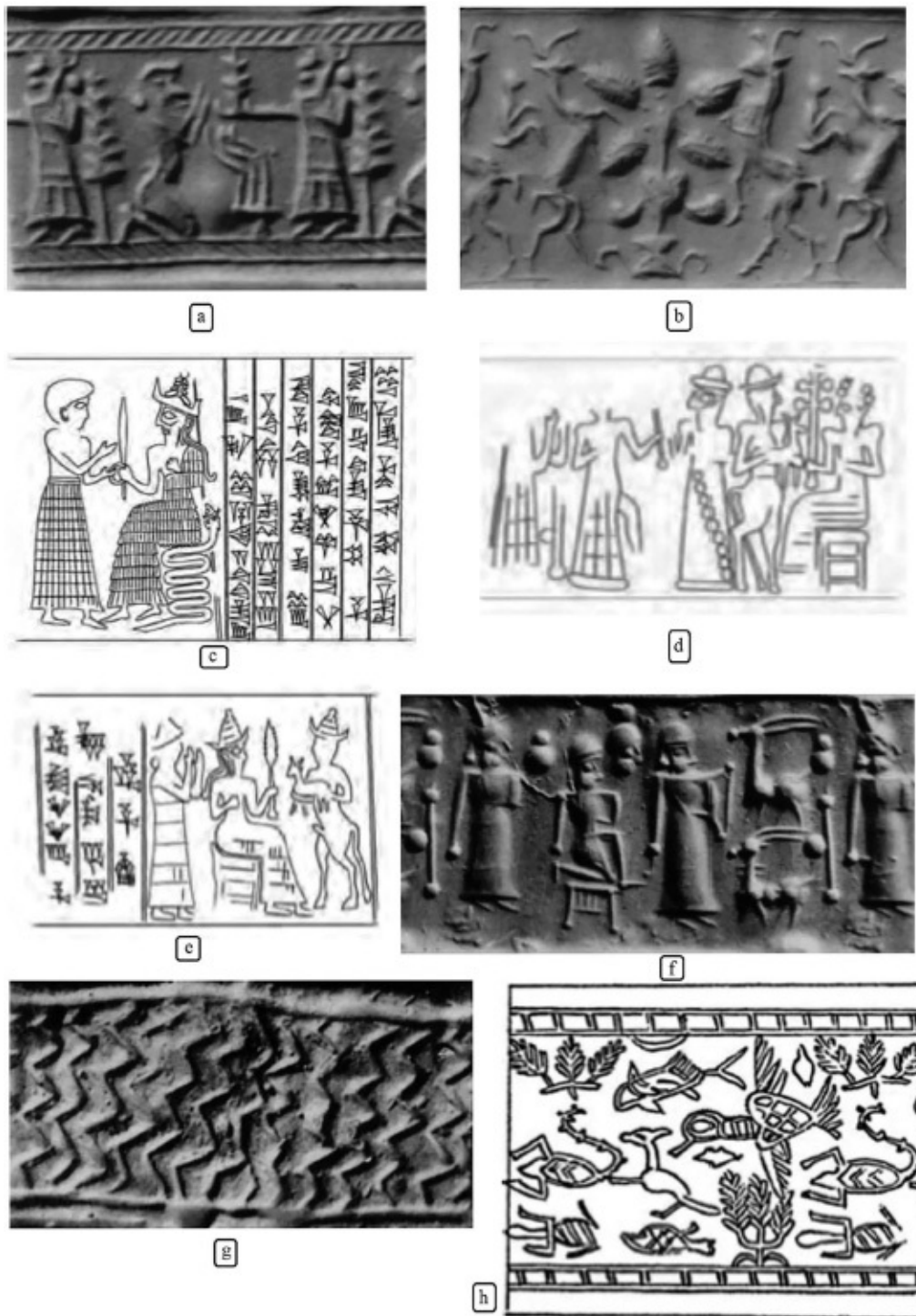


Figure 31.8 [a-b] Middle-Elamite seals from Susa after Amiet 1972: nn. 2120–2121; [c-e] Middle-Elamite sealings from Haft Tepe after Mofidi-Nasrabadi 2011: nn. 11, 32 and 126; [f-h] Middle-Elamite seal from Choga Zanbil after Porada 1970: nn. 112, 148 and 51.

The Early group appears close to the previous productions of Old-Elamite seals, as attested in the so-called *Winnirkegroup* of Seidl (1990: 129–135), where the main figurative aspects are the small size of the personages, a strong stylization of figures and a general increase of the number of icons. This specific production should be dated to the Early Middle-Elamite period,

probably to its first historical phase (Middle-Elamite I). The same seals were found at Susa, Choga Zanbil, Nuzi and Surkh Dum-i Luri in the Luristan province. Within the same chronological range should be dated the seal of Tepti-Ahar for its iconographic and stylistic relations with the earlier seals of the Old-Elamite IIIB period; documented in this seal is the presentation scene of the ruler before a god, presumably Napirisha, who holds a staff with globes, a specific motif that increased in importance from the Old-Babylonian period towards the end of the 17th century BC.

The so-called Mitannian style is documented in seals where the use of a fine drill is widely attested; the most commonly represented themes are the palmette tree flanked by two goats, and the god/king who receives a bottle and napkin from a female figure. The style follows a chaotic scheme in a volumetric expression, far removed from the previous period.

The Middle-Assyrian group is represented by several seals in which a hero with two goats (or an archer) is generally represented. The figurative apparatus remains lively, in a naturalistic context mostly represented by tall plants. The carving is careful with a deep incision in the surface of the seals. Middle-Assyrian related seals come also from Sork Dum-i Luri, and two were from Marlik, but few specimens were found at Susa.

The Kassite group shows a repetitive and standardized scene in which one, two or three standing figures of gods and worshipers are depicted, with an inscription that can fill most of the representation. The dating of this group should be limited to the Susa VIII period as well as a group of fine cylinders of blue glass that follow the characteristic Kassite scene, with the same carving, iconography and style. However, several seals, produced in the same material, should be considered a production very close to the Elamite figurative heritage: the scenes are mainly characterized by the presence of architectonic frames filled with fine criss-crossing and dot circles, and the depictions are usually enriched by volute trees and large birds or by an archer aiming at game.

Other Middle-Elamite seals are mainly made in faience, and unlike the categories described above, their designs were produced in a largely linear manner. The representations are of humans rather than gods, and the rows of animals and banquet scenes are often depicted in a wider thematic range. The most common motif, however, is the personage raising a cup in front of an attendant, a theme inserted in a representation where inscriptions and secondary iconographic elements (such as birds or unidentified animals) are added.

After the reign of the Shutrukid dynast Hutelutush-Inshushinak, it becomes difficult to follow Elamite history and culture until the late eighth century BC, when relations would be mainly with Assyria and much less with the Babylonian area.

[Table. 31.1 Comparative analysis among areas, periods and classes of seal production](#)

<i>Date</i>	<i>Dynasty</i>	<i>Archaeological Phase</i> <i>(Susiana/Fars/SE Iran)</i>	<i>Period</i>	<i>Glyptic</i> <i>Susiana/Fars</i>	<i>Production</i> <i>South-East Iran</i>
4000–3500		– Susa I – Late Bakun-Lapui – Yahya VI-VC	Susa A	Susa A	
3500–3100		– Susa II – Late Banesh – Yahya VB-VA	Susa B	Uruk	
3100–2700		– Susa III – Middle/Late Banesh – Yahya IVC – Mahtoutabad III	Proto-Elamite	Proto-Elamite	Proto-Elamite
2700–2300	Awan	– Susa IVA – Shrine Phase (Citadel, KSS) – Early Phase (Citadel, KSS) – Phases 2–3 (Lower Town, KSS) – Transition Banesh/Kaftari – Shahdad IV ₁	Early-Elamite	– ED II-III – Piedmont	Konar Sandal South
2300–2120	Awan	– Susa IVB-VA – Kaftari – Yahya IVB – Shahdad III ₂	Old-Elamite I	– Akkadian – Post-Akkadian – Piedmont	Early SE Iranian
2120–1920	Simashki	– Susa VB – Kaftari – Yahya IVA – Shahdad III ₁ – Gonur Phase	Old-Elamite II	– Neo-Sumerian – Early Old-Elamite – Early Anshanite – Classic Anshanite	Late SE Iranian
<i>Date</i>	<i>Dynasty</i>	<i>Archaeological Phase</i> <i>(Susiana/Fars/SE Iran)</i>	<i>Period</i>	<i>Glyptic</i> <i>Susiana/Fars</i>	<i>Production</i> <i>South-East Iran</i>
1920–1800	Sukkalmaḫ	– Susa VB – Kaftari – Yahya IVA	Old-Elamite IIIA	– Old-Babylonian – Trans. Old-Elamite – Classic Anshanite	
1800–1650	Sukkalmaḫ	Susa VI	Old-Elamite IIIB	– Old-Babylonian – Classic Old-Elamite – Late Anshanite	
1650–1520	Sukkalmaḫ	– Susa VI/VII – Early Qaleh	Old-Elamite IIIC	– Late Old-Elamite	
1520–1400	‘Kidinuīds’	– Susa VII – Haft Tepe – Early Qaleh	Middle-Elamite I	– Early Middle-Elamite – Mitannian group – Pseudo-Kassite group	
1400–1200	‘Iḡihalkīds’	– Susa VIII – Early/Late Qaleh – Choga Zanbil	Middle-Elamite II	– Middle-Assyrian group – Pseudo-Kassite group – Middle-Elamite group	
1200–1100	‘Šutrukīds’	– Susa VIII – Late Qaleh	Middle-Elamite III	– Middle-Elamite group – Middle Assyrian group	

Notes

- ¹ This period is known in the Lower Town (in phases 2–3), in the Citadel (Early and Shrine phases) and in the Mahtoutabad cemetery (III period).
- ² On the chronological proposals see also Porada 1958: 66 and Matthews 1997: 146–147.
- ³ Lastly, H. Pittman (2001: 236) has preferred to call this group of seals ‘South Central Iranian Glyptic’.
- ⁴ Trench V, contrary to evidence collected in Trench III where the sealings seem to be earlier and belonging to the above Konar Sandal South group, gave back numerous cretulae found in a dump placed on the eastern flank of the

- fortifications between the Lower Town and the Citadel (Madjidzadeh 2008: 94–96).
- 5 In the absence of a peculiar trait for divinities, we should assume that the long (but not beyond the shoulders) and loose hair are generally specific to the goddess; on the contrary, the hair encased in a bun seems to be related to the faithful (see comparisons with the statues found at Shahdad); same absences are attested in the Anshanite seals (see *Anshanite production*).
 - 6 This production, called ‘Anshanite’ in order to distinguish it from the contemporary Old-Elamite seals, is well represented at Susa where ca. 300 seals were found in the French excavations (see *Anshanite production*).
 - 7 A group of specimens (seals and sealings) for style and iconography has to be considered a dynastic production in which the names of Ebarat, Attahushu, Kuk-Kirmash and Kuk-Nashur appear in the inscriptions of seals.
 - 8 The goddess must be the same as that depicted on the Rosen seal; she is represented on a throne inside the sun rising from the mountains bringing with it the arrival of spring, represented by the god with snakes protected by two unidentified mythological figures.
 - 9 The terminology follows Tosi’s (1977: 47) historical evaluations on this area.
 - 10 An overview of this class of production is in Baghestani 1997 and Salvatori 2000.
 - 11 The so-called Middle Asian Interaction Sphere (MAIS) by Possehl (2002: 215–236) has been used in order to underline the interactive process between Indus valley and its neighbours, starting from a Harappan perspective (see also Pittman 2013). It is my belief that during the second half of 3rd millennium BC, more intensive and wider relations in an Integrated Cultural System were between the South-East Iranian regions and the Oxus civilisation, in which the Indus valley played a role only in a well-structured commercial system. However, the evidence of an integrated system of thoughts and knowledge should be identified between Margiana and Kerman province (Ascalone 2014).
 - 12 The corpus from Haft Tepe has been divided into seven main groups, in which have been identified Babylonian, Elamite-Babylonian (or Susian-Elamite), Kassite and Mitannian productions (Mofidi-Nasrabadi 2011).
 - 13 Following an iconographic approach, E. Porada (1970) identified ten stylistic groups in the corpus of Choga Zanbil.

Bibliography

- Amiet, P. 1972. *La glyptique susienne, des origines à l’époque des perses achéménides. Cachets, sceaux-cylindres et empreintes antiques découvertes à Suse, de 1913 à 1967*. Mémoires de la Délégation Archéologique en Iran 43. Paris.
- Aruz, J., Harper, P.O. and Tallon, F. 1992. *The Royal City of Susa. Ancient Near Eastern Treasures in the Louvre*. New York.
- Ascalone, E. 2011. *Glittica Elamita. Dalla metà del III alla metà del II millennio a.C. Sigilli a stamppo, sigilli a cilindro e impronte rinvenute in Iran e provenienti da collezioni private e museali*. Rome.
- . 2014. Intercultural Relations Between Southern Iran and Oxus Civilization. The Strange Case of Bifacial Seal NMI 1660. *Iranian Journal of Archaeological Studies* 4: 1–10.
- . 2015. *Bastanshenasi Iran Bastan. Gahnegari-e Hezareeh-e sevvom pish az milad*, Studies and Publications Institute, University for Humanities Sciences (SAMT), Research Center and Development. Tehran.
- Baghestani, S. 1997. *Metallene compartmentsiegel aus Ost-Iran, Zentralasien und Nord-China*. Archäologie in Iran und Turan. Leidorf.

- Frankfort, H. 1955. *Stratified Cylinder Seals from the Diyala Region*. Oriental Institute Publications 72. Chicago.
- Le Breton, L. 1957. The Early Periods at Susa, Mesopotamia Relations. *Iraq* 19: 79–124.
- Madjidzadeh, Y. 2008. Excavations at Konar Sandal in the Region of Jiroft in the Halil Basin: First Preliminary Report (2002–2008). *Iran* 46: 69–104.
- Matthews, D. 1997. *The Early Glyptic of Tell Brak. Cylinder Seals of Third Millennium Syria*. Orbis Biblicus et Orientalis 15. Fribourg.
- Mecquenem de, R. 1934. Fouilles de Suse 1929 à 1933 (sur l'acropole et la ville royale). *Mémoires de la Délégation en Perse* 25: 177–237.
- Mofidi-Nasrabadi, Behzad 2011. *Die Glyptik aus Haft Tepe. Interkulturen Aspekte zur Herstellung Benutzung von Siegeln in der Anfangsphase der Mittelelamischen zeit*. Elamica 1. Mainz.
- Pittman, H. 1980. Proto-Elamite Glyptic Art from Operation ABC In: Sumner, W.M. (ed.) *Problems of Large Scale, Multidisciplinary Regional Archaeological Research: The Malyan Project*. Xerox.
- . 2001. Glyptic Art of Period IV. In: Potts, D.T. (ed.) *Excavations at Tepe Yahya, Iran, 1967–1975: Periods IVC and IVB (3000–2000 BC)*. Cambridge, 231–268.
- . 2008. Glyptic Art. *Iran*: 95–100.
- . 2013. New Evidence for Interaction between the Iranian Plateau and the Indus Valley: Seals and Sealings from Konar Sandal South. In: S. Abraham (ed.) *Connections and Complexity: New Approaches to the Archaeology of South Asia*. Walnut Creek, 63–89.
- Porada, E. 1958. Review of Frankfort 1955. *Journal of Near Eastern Studies* 17: 62–67.
- . 1970. *Tchoga Zanbil. La glyptique*. Mémoires de la Délégation Archéologique en Iran 42. Paris.
- Possehl, G.L. 2002. *The Indus Civilization. A Contemporary Perspective*. Walnut Creek, CA: AltaMira Press.
- Salvatori, S. 2000. Bactria and Margiana Seals, A New Assessment of Their Chronological Position and a Typological Survey. *East and West* 50: 97–146.
- Scheil, V. 1900. *Textes Élamites Sémitiques*. Mémoires de la délégation en Perse 2. Paris.
- Seidl, U. 1990. Altelamische Siegel. In F. Vallat (ed.) *Contribution à l'histoire de l'Iran: mélanges offerts à Jean Perrot* (= Edition Recherche sur les Civilisations), Paris, 129–135.
- Tallon, F. 1987. *Métallurgie susienne I-II: de la fondation de Suse au XVIII siècle avant J.-C.* Musée du Louvre Département des antiquités orientales. Paris.
- Tosi, M. 1977. The Archaeological Evidence for Protostate Structure in Eastern Iran and Central Asia at the End of the Third Millennium B.C. In: Deshayes, J. (ed.) *Le plateau iranien et l'Asie centrale des origines à la conquête islamique. Leurs relations à la lumière des documents archéologique, Paris 22/24 Mars 1976*. Paris, 45–66.

CHAPTER THIRTY-TWO

Glyptic in the 1st millennium



Mark B. Garrison

Introduction

The collapse of the Middle Elamite state appears to mark a major hiatus in glyptic production and use in Elam. Whether this hiatus represents an actual historical phenomenon or simply a lack of excavated evidence is difficult to determine.¹ For the Neo-Elamite period, we do not have any substantial deposits of actual seals or seals preserved as impressions on administrative tablets. This situation is very different from the preceding Middle Elamite period, for which we have rich glyptic corpora excavated from Chogha Zanbil (Porada 1970; Amiet 2000), Haft Tepe (Negahban 1991; Amiet 1996, 1999), and Susa (Amiet 1972).²

Neo-Elamite glyptic is traditionally delineated into two chronological groups, an early one, ca. 1000–800/700 BC, and a late one (“late Neo-Elamite glyptic”), ca. 800/700–late 6th century BC (Amiet 1972: 273–283; Porada 1993: 496–500; Garrison 2006). It is impossible to determine internal stylistic developments within each of these two chronological groups owing to the lack of excavated evidence and/or the lack of carefully excavated evidence. In both cases, we are dealing with very small numbers of actual images. The early group is rarely considered. Late Neo-Elamite glyptic has, however, been the focus of some discussion owing to its potential implications for a revived Elamite polity at Susa and its linkages with a massive corpus of seals preserved as impressions on the administrative documents from the Persepolis Fortification archive (dating to the early and middle years of the reign of Darius I).³

Early Neo-Elamite glyptic

For early Neo-Elamite glyptic, our best evidence comes from Susa (Amiet 1972: nos. 2121–2159). The corpus consists exclusively of actual cylinder seals (rather than impressions on clay documents).⁴ The preferred materials are faience and bitumen, both of which are used for seals in the Middle Elamite period (van Loon 1989: 417).⁵ Amiet (1972: 274) characterized the assemblage as “souvent assez grossièrement exécutés.” The exact archaeological context of

these seals from Susa is either unknown or not meaningful. As Amiet (1972: 273, 1973: 3) and Porada (1993: 496) noted, a coherent internal classification and chronological sequencing of these seals is not possible, although some stylistic clusters are certainly recognizable. There is disagreement as to whether some of these seals may in fact date to the late Middle Elamite period rather than the early Neo-Elamite period (e.g., Harper, Aruz, and Tallon 1992: 157–158, discussing Amiet 1972: no. 2124). Amiet (1972: 273), followed by others, suggested that nos. 2121–2125, which are executed in a delicate elongated style and feature heraldic animals disposed around the so-called sacred tree, could be direct descendants of late Middle Elamite glyptic (“late-Kassite style” [Harper et al. 1992: 157–158]). Porada (1993: 496) identified Amiet (1972) nos. 2131–2145, all cylinders of faience, as continuing (but in a less accomplished carving) various linear styles of carving found in some of the seals from Chogha Zanbil. Amiet (1972) no. 2130 could also belong with this stylistic group.⁶ There is a variety of themes including archers, animal combats, and abstract designs. Muscarella (1981: 357) and van Loon (1989: 431) related two seals from Susa (Amiet 1972: nos. 2126 and 2127), characterized by, among other features, a deeply gouged, schematic style of carving and sickle-shaped wings that carry hatching, with a seal from Surkh Dum-i Luri (van Loon 1989: no. 109). All three seals are made from bitumen. The style seems more at home in Luristan than Elam.

Surkh Dum-i Luri

Van Loon (1989: 416) considered Surkh Dum-i Luri (in southeastern Luristan) as potentially lying within an Elamite cultural orbit. Excavations from the site, principally from the sanctuary, yielded some 168 cylinder seals, 32 stamp seals, and one fragmentary impression of a cylinder seal (van Loon 1989: 413–474, nos. 41–223 and xiii – xlv). Van Loon (1989: 446–448) dated this material broadly to the Iron Age, ca. 12th–6th centuries BC. To consider this glyptic corpus as representative of Elamite glyptic, however, would be mistaken. While, as we have seen, there are some connections to the early Neo-Elamite material from Susa, the predominant (recognizable) stylistic idioms are Assyrian and what one could characterize as a local Luristan style.

Late Neo-Elamite glyptic

Late Neo-Elamite glyptic became a topic of some importance with a seminal publication by Amiet in 1973. The designation late Neo-Elamite glyptic is potentially somewhat confusing. Within glyptic studies, late Neo-Elamite signifies a corpus of seals that are stylistically and chronologically distinct from the corpus of early Neo-Elamite seals discussed above. Late Neo-Elamite glyptic is dated to the period ca. 800/700–late 6th century BC (the end date perhaps specifically being 539 BC, with Cyrus’ conquest of Babylon). While late Neo-Elamite glyptic

denotes a distinct artifactual phenomenon having specific chronological boundaries, the term ought not to be conflated with the various historical/archaeological phases that have been construed for the Neo-Elamite period.⁷

There has emerged a general consensus that sometime in the second half of the 7th century BC, after the sack of Susa in 647 BC by the forces of Aššurbanipal, there arose in Susa some type of revived political state; its extent and political influence are debated.⁸ This perspective is radically different from a more traditional one that saw the Assyrian destruction of Susa as complete and long-lasting. Late Neo-Elamite glyptic emerges within this new perspective as a critical resource potentially documenting this political revival.

The chronological period covered by late Neo-Elamite glyptic occurs at an exceptionally critical moment in what specialists have come to call, after de Miroschedji (1985: 295), the “ethnogénèse des Perses.” Henkelman (e.g., 2003, 2008: 4–49, 2011) has expanded this line of inquiry and made significant contributions towards our understanding of what he calls “Elamite-Iranian acculturation.”⁹ Indeed, Elam has now so emerged as the central focal zone for the discourse surrounding the early Persians that Liverani (2003: 10) has famously (and definitively) remarked, “Persia is the heir of Elam, not of Media.” The role of Elam has thus become central to issues surrounding the formation of the Persian peoples and state. Late Neo-Elamite glyptic, accordingly, also emerges as a critical resource in documenting this sociopolitical phenomenon.

Late Neo-Elamite Glyptic from Susa

Amiet (1973) first defined the corpus of late Neo-Elamite glyptic (“la glyptique de la fin d’Élam”). Very little new evidence bearing on the question of late Neo-Elamite glyptic has emerged from excavations at Susa since 1973 (e.g., de Miroschedji 1982; van Loon 1988; Amiet 1992: 92, 1994). At the heart of Amiet’s corpus were 16 seals preserved as impressions on administrative documents known today as the Acropole tablets and seven seals impressed on legal contracts known today as the Apadana (or Palace of Darius) tablets.¹⁰ The archaeological disposition of the two corpora of tablets at Susa was not well documented (Garrison 2006: 93 note 6). The relative chronological relationship of the two corpora to each other, and their absolute dates, are often debated. Although Amiet suggested, based on the glyptic evidence, that the Apadana tablets were slightly later in date than the Acropole tablets, I see no compelling evidence to separate the two corpora in any chronologically meaningful manner (Garrison 2006: 72–73). Amiet (1973: 25) dated the Acropole tablets to the late 7th and early 6th centuries BC based upon his stylistic and iconographic analysis of the seals. More recent commentators, relying on both stylistic analyses of the seals and paleographic analyses of the texts, have preferred a later date for both sets of tablets, sometime in the 6th century BC, the debate now being whether early or late in the 6th century BC.¹¹ Henkelman (2008: 5–6) notes

that the Acropole texts most likely cover a very short period of time, certainly less than one generation, since the texts carry no year dates and only one individual, Kuddakaka, “appears as the one responsible for the royal stores.”

To flesh out the corpus of late Neo-Elamite glyptic, Amiet (1973) added to the seals preserved as impressions on the tablets from Susa 15 actual seals excavated at Susa, one seal from Ur, and 23 unprovenanced seals.¹² Most of these seals carry Neo-Elamite cuneiform inscriptions, apparently the chief criterion for Amiet’s inclusion of them in his late Neo-Elamite corpus. The excavated seals from Susa and Ur had no chronologically meaningful archaeological contexts (and hence do not provide any clues as to the exact dating of the Acropole or Apadana tablets).¹³

From this data, Amiet reconstructed three phases in the development of late Neo-Elamite glyptic:

- (1) the seals preserved on the Acropole tablets (and related glyptic material);
- (2) the seals on the Apadana tablets (and related glyptic material);
- (3) the seals in the Fortification archive from Persepolis (dated 509–493 BC in the reign of the Achaemenid king Darius I).¹⁴

Thus, already in 1973 Amiet had considered the glyptic from Susa as directly linked in meaningful ways with the seals from Persepolis; indeed, the seals preserved in the Fortification archive he saw as yet a third stage in the development of late Neo-Elamite glyptic. Amiet (1992: 91–92) later suggested that what he had originally termed “la glyptique de la fin d’Élam” ought perhaps to be better qualified as “élamo-perse.” This change was in fact anticipated in his initial publication of this corpus, where he stated (Amiet 1973: 26):

Née après l’effondrement de la puissance élamite, cette glyptique (*MBG: la glyptique de la fin d’Élam*) ne devrait-elle pas être attribuée plutôt aux Perses établis dans les deux grandes provinces du vieil Élam: le pays d’Anshan et la Susiane? Elle est en fait le témoin de la fusion de deux populations, de sorte qu’on peut aussi bien la considérer comme l’ultime manifestation de la civilisation élamite que comme la première manifestation de l’art perse.

In two articles I have addressed various issues connected with late Neo-Elamite glyptic (Garrison 2006 and 2011). Even more vividly than Amiet may have envisioned, many seals preserved in the Fortification archive at Persepolis relate thematically, compositionally, and stylistically to many (but not all) of the seals preserved on the Acropole and Apadana tablets. The close connections of the glyptic evidence from Susa with that from Persepolis raise several important questions concerning the dating of the Susa evidence, the progenitors of the various glyptic styles documented at the two sites, and the mechanisms of contact between the various

stylistic centers (in Assyria and the lowlands and highlands of Elam).

Regarding the seals from Susa (and late Neo-Elamite glyptic as a whole), I have addressed briefly the use of Elamite inscriptions, glyptic style and themes, and seal size and shape (cylinders) in a previous study (Garrison 2006). Since that article, I have had the opportunity to examine both the Acropole and the Apadana tablets and to make collated drawings of the 23 seals used on them.¹⁵ Considerable headway has also been made in recent years in studying the unpublished glyptic from the Persepolis Fortification archive. A full commentary on the glyptic from Susa will have to await another venue. I shall address briefly in this chapter carving styles and inscribed seals at Susa and then offer a few comments on each of the seals preserved on the Acropole and the Apadana tablets.

Amiet's principal interest in discussing the seals from the Acropole tablets and the Apadana tablets was tracking linkages to previous Assyro-Babylonian glyptic. My comments will look east towards Persepolis, focusing on the connections with the glyptic from the Persepolis Fortification archive and, to a lesser extent, the glyptic from the Persepolis Treasury archive (dated 492–457 BC).¹⁶

Late Neo-Elamite carving styles at Susa

It is important to remember that we are dealing with a small number of seals, 16 on the Acropole tablets, seven on the Apadana. Thus, we probably are not in a position to make broad statements about the stylistic qualities of late Neo-Elamite glyptic as a whole, or, indeed, even late Neo-Elamite glyptic at Susa. Be that as it may, there is a remarkable stylistic consistency among the seals preserved on the Acropole tablets and Apadana tablets. Almost all of the seals are small and executed in a modeled carving that is deeply carved in select passages of human and animal anatomy and has a vigorous and tightly controlled outline. Some distinctive characteristics of this carving style are puffy, heart-shaped shoulders and pinched waists on human figures and segmentation of the chests on the animals and winged creatures. The basic modeled approach to the rendering of human and animal forms is, as Amiet noted, a direct inheritance from Assyro-Babylonian glyptic. A similar carving style is extremely popular at Persepolis.¹⁷ For ease of reference, I shall call it hereafter the miniaturist modeled style of carving.

Given the small numbers of seals preserved on the tablets from Susa and what I see to be an overall stylistic unity in this material, I see no way to distinguish any meaningful stylistic development (reflecting a movement through time) between the two corpora (Garrison 2006: 72–79).

Late Neo-Elamite inscribed seals at Susa

Of the 12 inscribed seals from Susa, 11 are in Elamite.¹⁸ Almost all of the inscriptions are fragmentary. My collations for the most part confirm the readings that Amiet (1973: 27–28) provided. I have been able in a few cases to see a few more broken signs, but only in one case, Amiet no. 16, may I offer a reading that is radically different from that found in Amiet (1973).¹⁹

Elamite is by far and away the preferred language for seal inscriptions at Persepolis.²⁰ We have now documented some 84 seals from the Fortification archive that carry monolingual Elamite inscriptions (cf. Garrison 2006: 70–72). PN₁ DUMU PN₂(-*na*) is the most common formula used in Elamite inscriptions from Persepolis. The percentage of inscribed seals (in any language) used in the Fortification archive is very low, currently only about 5%. At Persepolis, inscribed seals almost always, when we can collate a seal with an official/office, are associated with officials/offices of high administrative rank.

Given the data from the Fortification archive, it is perhaps quite surprising that there is such a high percentage of inscribed seals in the two Susa corpora; nine seals (out of 16) in the Acropole corpus and three (out of seven) in the Apadana corpus.²¹ This phenomenon is really quite striking, and one does not know exactly what to make of it.

There are, however, at Persepolis a few types of transactions that are sealed with a very high percentage of inscribed seals, similar in fact to the high percentage of inscribed seals at Susa. These transactions, perhaps to no surprise, concern individuals of high administrative rank. For example, letters and letter-orders from the Fortification archive (Hallock's text category T) and the Treasury archive are issued by individuals of high administrative authority (and in some cases exceptional social status); the issuers of letters in the Fortification archive include, for example, Parnaka (PFS 9* and PFS 16*) and Ziššawiš (PFS 83* and PFS 11*), the director and deputy-director of the agency, the royal women Irdabama (PFS 51) and Irtašduna (PFS 38), and Iršama (PFS 2899*), the son of Darius and Irtašduna. We can currently identify some 35 different seals on the letters and letter-orders from the Fortification archive. Eighteen of these seals are inscribed, 17 uninscribed. Thus, some 51% of the seals used on the letters and letter-orders from the Fortification archive are inscribed. Inscribed seals are even more pronounced in the letter-orders from the Treasury archive. Of the 11 seals that occur, nine are inscribed.²²

This linkage of inscribed seals with officials/offices of high administrative rank is, of course, common in almost all periods in ancient western Asia; the close proximity in time, space, and administrative protocols between the archives from Susa and Persepolis suggests that the association of inscribed seals with individuals of high administrative rank in the one (Persepolis) is likely to apply to the other (Susa) as well. One should thus probably infer that both glyptic corpora from Susa involve officials/offices of high administrative rank.

The glyptic corpus from Susa: a short commentary

Amiet no. 1 (Delaporte 1920: Pl. 48, no. 16; Amiet 1973: 7)

A heroic encounter of the control type. Amiet thought that the hero is nude, but this is not the case; one can clearly see the front hem of the Assyrian garment as it runs between the legs. The heroic encounter is one of the most popular thematic types at Persepolis; the winged human-headed leonine creatures are also a favorite of the heroic encounters at Persepolis. As Amiet remarked, the style of Amiet no. 1 is a deeply carved modeled style with little surface manipulation; human and animal figures are large. At Persepolis, there are various iterations of what we may characterize as a Persepolitan Modeled Style. One of these styles employs large figures with heavily modeled forms and little surface detailing; this version of the Persepolitan Modeled Style is especially common in heroic encounters.²³ I would also note the stylistic peculiarity of heavily segmented forms; for example, the arms of the hero and the passage at the chest of the rampant winged human-headed creatures. This segmentation of form is often seen in various modeled styles at Persepolis.

Amiet no. 2 (Amiet 1973: 7)

A heroic encounter of the control type. The heads of the winged creatures are not preserved; they are probably bird-headed, as Amiet hinted, and the one at left appears to have a bird's tail. The hero appears to wear a long skirt belted at the waist, but the lower part of the body is not preserved (cf. Amiet, "vêtu d'un pagne"). The hero has four wings, one set emerging upward from the shoulders, the other downward. The theme and iconographic details are abundantly documented at Persepolis. The style is the miniaturist modeled style (see above): small figures executed in a vigorous and tightly controlled modeled carving. Note especially the puffy, heart-shaped shoulders and pinched waist of the hero and the segmentation of the chests of the winged creatures. As noted, this style is extremely popular at Persepolis.

Amiet no. 3 (Delaporte 1920: Pl. 48, no. 11; Amiet 1973: 7–8)

A heroic encounter of the combat type; in the terminal field there are heraldic winged human-faced taurine creatures. The hero is frontal-faced and raises his forward leg to place it on one of the legs of the ostrich. This is a remarkable design. The frontal hero with three locks of hair is a striking archaism. Amiet (1973: 7–8) stressed the Babylonian heritage of both the frontal-faced hero and the carving style. The frontal-faced hero appears sporadically in the glyptic and monumental arts of both Assyria and Babylonia. To date, the frontal-faced hero has been

attested only twice in Persepolitan glyptic, PFS 152 (Cat.No. 295) and PFS 538 (Cat.No. 312). Like Amiet no. 3, both PFS 152 and PFS 538 are virtuosic reimaginings of the age-old theme, although in both cases the scenes are augmented with other human figures. The pose of the hero on Amiet no. 3 is as interesting as his frontal face. He lifts his forward leg to place it on one of the legs of the ostrich; one hand is extended to hold the ostrich by the neck, the other held down behind his body to grasp an elaborate double-bladed scimitar. This pose and the weapon are common in Persepolitan glyptic; indeed, the uplifted leg is employed in the similarly archaizing PFS 538 (Cat.No. 312). At Persepolis, the hero with uplifted leg generally chases the animal/creature rather than confronts it (as Amiet no. 3), but the confronting pose is documented as well.²⁴ The ostrich that the hero holds is another archaism, this time evoking Assyrian glyptic. Two seals from Persepolis present very similar heroic encounters with ostriches: PFS 9* (Cat.No. 288) and PFS 263 (Cat.No. 289).²⁵ In both cases, the hero grasps the neck of the ostrich and holds a scimitar down behind his body; the hero on PFS 263 lifts his forward leg to place it on the leg of the ostrich. PFS 9*, it should be noted, is the first seal of the director of the agency, Parnaka. Amiet (1973: 7) stated that the hero on Amiet no. 3 is nude, but he clearly wears a knee-length skirt with a sash, belt, or tassel hanging between his legs. The garment, with elaborate detailing, is commonly documented in Persepolitan glyptic.²⁶

Amiet (1973: 7) identified the winged creatures as caprid, but they seem rather to be taurine, if we may judge from the thicknesses of the bodies, the length of the tails, and the tufts at the ends of the tails. Human-headed or human-faced taurine creatures are documented in Persepolitan glyptic; they often are specifically linked with what I have called court-centric iconography.²⁷

At Persepolis, the heroic encounters where the hero places one leg on the hind leg of the animal/creature are generally executed in the miniaturist modeled style of carving; the scenes are noteworthy for their dynamism and wealth of iconographic detail. Amiet no. 3 exhibits a similar modeled style of carving. The seals from Persepolis, like Amiet no. 3, are archaizing rather than archaic.

Amiet no. 4 (Delaporte 1920: Pl. 48, no. 17; Amiet 1973: 8)

A winged genius is disposed to either side of a stylized tree; a bird in flight is in the terminal field. The composition of genii or bull-men disposed around a stylized tree is well documented in the glyptic from the Fortification archive (see also the comments below concerning Amiet no. 5); generally, at Persepolis, the scene involves bull-men holding aloft a winged symbol over the stylized tree.²⁸ A bird in flight in the terminal field is also common at Persepolis. Amiet (1973: 8) remarked that the manner in which the branches and leaves/cones of the

stylized tree are rendered evokes Middle Assyrian glyptic; again, there are numerous examples of similar renderings on seals from Persepolis. The carving is very delicate and there is an abundance of detailing in the garments. The seal is executed in the miniaturist modeled style; note again the distinctive segmentation in the area of the chest and shoulder of the genius to left of the stylized tree as well as the profile shoulders on both genii. These stylistic features are very common in the miniaturist modeled style at Persepolis.²⁹

Amiet no. 5 (Delaporte 1920: Pl. 48, nos. 14 and 19; Amiet 1973: 8)

A winged genius is disposed to either side of a stylized tree; in the terminal field there is a seated(?) figure above an animal (dog?). This is another handsomely carved design; the stylized tree has an especially calligraphic quality. The stylized tree is much more elaborate than in Amiet's drawing. It appears as if there are two registers in the terminal field; such a feature is undocumented in Persepolitan glyptic. The seal is closely related stylistically (miniaturist modeled style of carving) to Amiet nos. 5 and 6, but especially the latter. Note particularly the distinctive heart-shaped torsos and pinched waists of the genii; both stylistic features are abundantly documented in Persepolitan glyptic. PFS 2089* and PFS 2311, which show winged genii to either side of a stylized tree, are very close compositionally, iconographically, and stylistically to Amiet no. 5. All three seals are heavily Assyrianizing.

Amiet no. 6 (Delaporte 1920: Pl. 48, no. 18; Amiet 1973: 8–9)

A winged genius is disposed to either side of a stylized tree; a small worshiper faces away from the genii in the lower right field. A Babylonian inscription runs across the top of the design in a panel; the inscription continues in five more lines in a panel with case lines in the terminal field (a prayer to Marduk and Nabû).³⁰ Amiet no. 6 is the most commonly occurring seal on the Acropole tablets.³¹ The inscription is quite monumental and, like the carving, baroque; as Amiet (1973: 8–9) remarked, the disposition of the inscription seems more at home in Middle Assyrian and Kassite styles. Following Amiet (1973: 9), I find the rendering of the top of the stylized tree as a sun-disk quite unusual.³² The small worshipping figure is also an oddity. While cut broadly in the same style as Amiet nos. 4 and 5, the carving in Amiet no. 6 is very detailed and hard; there is an abundance of very small cut and drill work. The faces of the genii are abstractly rendered by a series of cuts and drills; the treatment is very common in Persepolitan glyptic. The carving overall is heavy and elaborate, perhaps a result of its aggressively archaizing quality.³³

Amiet no. 7 (Delaporte 1920: Pl. 48, no. 15; Amiet 1973: 9)

A heroic encounter of the control type; the creatures, rampant atlantid bull-men, are quite unusual in this scene type. Amiet (1973: 9) thought that all three figures in fact were atlantids, citing a similar composition in monumental relief at Tell Halaf. He noted glyptic and monumental art from other regions where figures stand in an atlantid pose but do not actually support anything (as in his no. 7). There are a few examples that are similar at Persepolis.³⁴ The carving is again the miniaturist modeled style but with exceptionally nervous musculature and outline on the hindquarters of the two bull-men. Such nervous musculature is sometimes seen in Persepolitan glyptic, most famously in PFS 16*, the second seal belonging to Parnaka, the director of the agency represented by the Fortification archive. There is much detailed carving in human faces.

Amiet no. 8 (Delaporte 1920: Pl. 48, no. 5; Amiet 1973: 10)

A winged figure in a running pose; there are a bird (at right) and a paneled Elamite inscription in the terminal field.³⁵ Amiet identified the pose as that of an atlantid figure, but this suggestion is difficult to reconcile with the fact that the figure clearly holds thin rope-like elements from which depend globular objects. The identification of these globular objects is challenging.³⁶ Amiet nos. 9 and 10 appear to show the same figural imagery as Amiet no. 8. While there are scenes of single human figures, or winged human figures, in Persepolitan glyptic, there is nothing that is exactly comparable to Amiet no. 8. It is interesting to note that all three seals that show this particular (and unusual) imagery from Susa are inscribed; we may have to do with a design that is unique to Susa and, perhaps, a particular workshop. The running pose is very common in heroic encounters in Assyro-Babylonian and Persepolitan glyptic. At Persepolis, when the hero is in a running pose, he often wears an elaborate Assyrianizing garment (as the running figure in Amiet no. 8 wears).³⁷ The carving is very good, indeed, quite extravagant; another nice example of the miniaturist modeled style. The emphatic segmentation of the human body is a hallmark of this miniaturist carving style at Persepolis. As with Amiet nos. 6 and 7, there is much abstract geometric detailing in the human face.

Amiet no. 9 (Delaporte 1920: Pl. 48, no. 4; Amiet 1973: 10)

A winged figure in a running pose; there is a paneled Elamite inscription in the terminal field.³⁸ The design, iconography, and carving style are for all intents and purposes exactly the same as Amiet nos. 8 and 10. Were it not for the inscriptions, one would be hard-pressed to

identify Amiet nos. 8 and 9 as two separate seals.

Amiet no. 10 (Delaporte 1920: Pl. 48, no. 6; Amiet 1973: 10)

A winged figure in a running pose; there is an Elamite inscription in the terminal field.³⁹ The inscription is not contained within a panel; three case lines are preserved. The imagery is not well preserved, but clearly the design and iconography are exactly the same as Amiet nos. 8 and 9. The carving is less robust than on Amiet nos. 8 and 9, and the inscription is less well executed.

Amiet no. 11 (Delaporte 1920: Pl. 48, no. 2; Amiet 1973: 10)

Apparently two heraldic rampant lions; there is a large paneled inscription in the terminal field.⁴⁰ The theme is very well represented in Persepolitan glyptic. The execution is quite accomplished; the carving is the miniaturist modeled style. The tails of the rampant lions encroach on the paneled inscription. This feature, that is, the intrusion of figural elements into the field of the inscription, is not uncommon among inscribed seals in Persepolitan glyptic.

Amiet no. 12 (Amiet 1973: 10–11)

Two heraldic rampant animals; there is a large paneled inscription in the terminal field.⁴¹ Amiet (1973: 10–11) identified the animals as horses, but heraldic horses would be very unusual. The lower bodies appear taurine or leonine; the necks are elongated, suggesting perhaps some type of composite creature. In Persepolitan glyptic, there are almost 200 examples of heraldic animals or creatures; lions and caprids, often times winged and/or with human heads, are the most common. As noted in Garrison (2006), the pairing of heraldic animals/creatures, or animals/creatures with intertwined necks, with inscriptions is common at Persepolis. The carving is again a very accomplished miniaturist modeled style; the outline is very active and the lower bodies of the animals exhibit a nervous musculature. As with Amiet nos. 1, 2, 4, 8, 9, and 10, there is an emphatic segmentation of form (note especially here the passages at the chests of the animals); this is a common feature of the miniaturist modeled style at Persepolis.

Amiet no. 13 (Delaporte 1920: Pl. 48, no. 1; Amiet 1973: 11)

A winged human-headed lion (or bull?) and a paneled inscription.⁴² The theme,

animal/creature and an inscription, is very popular in Persepolitan glyptic (Garrison 2006). Indeed, PFS 73* could almost pass as the same seal as Amiet no. 13. As in similar designs at Persepolis, the carving of Amiet no. 13 is a miniaturist modeled style; note again the emphatic segmentation of form.

Amiet no. 14 (Delaporte 1920: Pl. 48, no. 13; Amiet 1973: 11)

A hunt from a chariot. The scene is quite interesting. There are two armed figures in the cart, one using a spear, the other an arrow, while a third figure drives the chariot team. Amiet (1973: 11) stressed the links to scenes of warfare in Assyrian seals and monumental relief. He noted that the animated quality of the figures was quite unlike what one sees in Assyrian glyptic and suggested that Assyrian monumental relief was perhaps more comparable. Chariot scenes are very popular in Persepolitan glyptic, numbering almost 80. Interestingly, the Persepolitan examples show only hunts (no warfare), and the individuals in the cart use either a spear or dagger or grapple hand-to-hand with the animal (bows, with one possible exception, are never employed). The animated quality of the figures in the cart is one of the hallmarks of the scene type at Persepolis. Very often in Persepolitan glyptic, the figure in the back of the cart leans out to spear an animal or creature, as Amiet no. 14. At Persepolis there is, however, only one possible example of three figures in the cart (rather than two or one) and one other possible example where the bow and arrow are involved (rather than spear, sword, or dagger).⁴³ The exaggerated manner in which the driver leans forward and the use of a bow will, of course, immediately call to mind the famous London Darius cylinder.⁴⁴ The square box-like cart is often documented in Persepolitan glyptic.⁴⁵ While archers in chariots are for all intents and purposes non-existent at Persepolis, standing or running archers are enormously popular. The rendering of the bow and both arms of the archer, the manner in which the bow-string is pulled and held, and the manner in which the hand holds the bow on Amiet no. 14 are all abundantly documented in archer scenes in Persepolitan glyptic.⁴⁶ While Amiet was correct in noting the existence of chariot scenes in Assyrian glyptic, those seals are almost all cut in a distinctive style, the Linear Style, that is very different from the carving style seen in Amiet no. 14.⁴⁷ On Amiet no 14 we see a rather restrained version of the miniaturist modeled style of carving; note especially the puffy, heart-shaped torso of the archer. Thus, while Assyrian glyptic and monumental art certainly provide examples of chariot scenes, in composition and style Amiet no. 14 is intimately linked with Persepolitan glyptic.

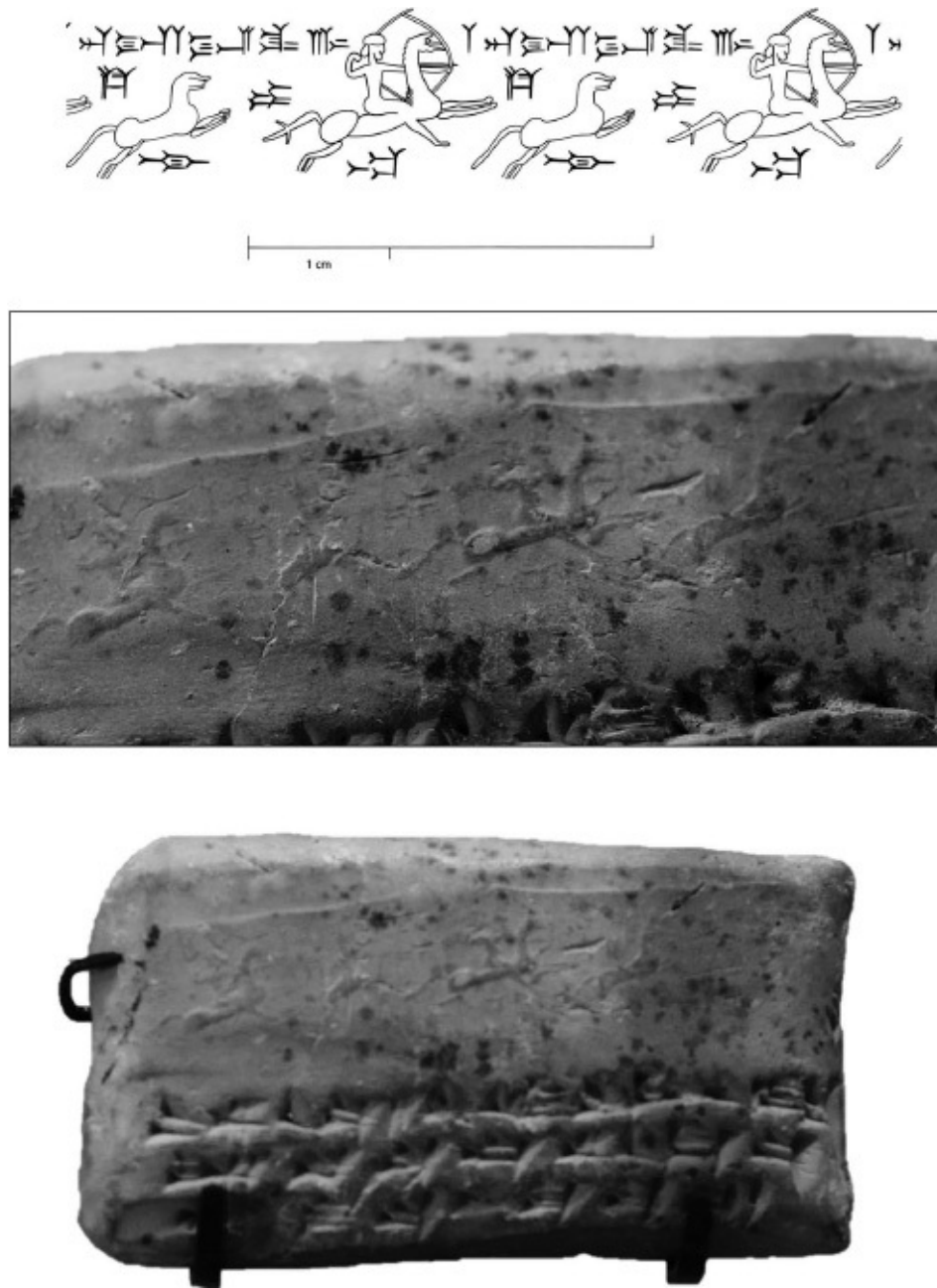
Amiet no. 15 (Delaporte 1920: Pl. 48, no. 10; Amiet 1973: 11)

A hunt from a chariot; an Elamite inscription is disposed in the field between the back of the

chariot and the rampant animal.⁴⁸ The rampant animal at the left of the preserved design is most likely a lion. There are only two figures in the cart of the chariot; the figure in the back of the cart appears clearly to be shooting a bow (although the bow is not preserved). This chariot scene, like the previous, is an interesting one, although somewhat of a hybrid. Amiet (1973: 11) highlighted the harnessing that runs between the cart and the draft animal, linking it to early Neo-Assyrian representations and carved ivories from Ziwiye. Chariot scenes from Persepolis show a variety of similar harnessing devices. Much more so than the harnessing, the rectangular cart and the manner in which the wheel of the chariot is set towards the back of the cart (rather than its middle) find many parallels in Assyrian monumental relief from both the early and the late periods.⁴⁹ Such a manner of depicting the placement of the chariot wheel is as yet undocumented in Persepolitan glyptic.⁵⁰ So, too, the inclusion of an inscription in a chariot scene is as yet undocumented at Persepolis.⁵¹ The pose of the archer and the carving, the miniaturist modeled style, are, however, closely connected to Persepolis.

Amiet no. 16 (Delaporte 1920: Pl. 48, no. 7; Amiet 1973: 11–12)

An archer riding on the back of a quadruped shoots at a fleeing quadruped; there is a three-line Elamite inscription disposed in the field. Amiet no. 16 is the most-discussed seal from the two glyptic corpora from Susa. Amiet (1973: 12), and many commentators following him, identified the theme, a hunter on horseback, as a hallmark of Late Neo-Elamite glyptic. In this connection, the seal is also often invoked in discussions of PFS 93* ([Figure 32.2](#)), the great heirloom seal from Persepolis that carries an inscription naming ‘Kuraš the Anzanite, Son of Šešpeš’ (Garrison 2011). PFS 93* shows a horseman spearing a human figure on foot; the latter turns toward the horseman and raises a broken bow. Dead enemies float horizontally in the lower field of the scene. Amiet noted that the theme of hunt on horseback has a general connection to Assyrian monumental relief of the time of Aššurbanipal.⁵² His suggestion that the rider on Amiet no. 16 is nude seems unlikely (the passage where one would expect the hem of a pair of pants is not well preserved). The animal that the bowman rides is not a horse, but some type of fantastic creature; the head appears avian or reptilian, while the tail is forked.⁵³



[Figure 32.1 Amiet no. 16 \(Delaporte 1920: Pl. 48, no. 7\). Line-drawing by Mark B. Garrison; photographs by J. Álvarez-Mon.](#)

Amiet (1973: 11) considered the carving on Amiet no. 16 to be quite noteworthy: “(l)a gravure en est d’une finesse exceptionnelle et présente des qualités de dessin et de modelé remarquables par la vivacité et l’élégance des attitudes.” While I would agree with Amiet concerning the general finesse of the carving, in fact stylistically the seal is closely related to the miniaturist modeled style that we have encountered in most of the previous seals. One should note here especially the segmentation in human and animal form. There is, however, quite a bit of fussy drill work in the carving; such drill work calls to mind Amiet no. 6.⁵⁴

We are able to offer an improved reading of the inscription on Amiet no. 16. Amiet (following M. Lambert) read:

kit(?)-*da-da*
hi-ku(?)
*[n]**a-ak*
'Kidada...'

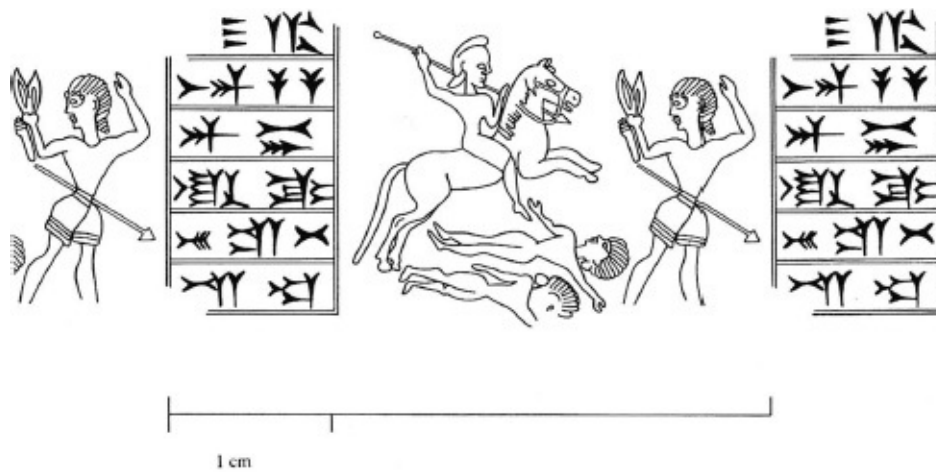
The inscription clearly starts in front of the horseman with the DIŠ sign; each of the following two lines also start in front of the horseman:

^{DIŠ}*an-da-da* DUMU EŠŠANA
ur/taš-še?-
eh-na
'Andada, son of King Taššeh'

We thus have a conventional late Neo-Elamite/Achaemenid Elamite inscription: PN₁ DUMU PN₂-*na*. Neither name (Andada or Taššeh) occurs in the texts from the Acropole tablets or the Apadana tablets; indeed, the names are unattested in the whole of the late Neo-Elamite onomasticon. Tavernier (2011: 198 s.v. 2.2.1.18 **Dāθayak-*) has suggested that Taššeh' is Iranian.⁵⁵ Unusual names are, however, quite common in the Elamite seal inscriptions from the Fortification archive.

Perhaps the most interesting issue is not the names, but the title EŠŠANA, 'king.'⁵⁶ Even more intriguing is the occurrence of the title in the patronym rather than the first personal name, an inscriptional formula that is unattested in late Neo-Elamite seal inscriptions. As W.H.M. Henkelman reminds me, there must have been many individuals in the Elamite highlands and lowlands in the 6th century BC who styled themselves 'king.' What, exactly, we ought to conclude from the occurrence of this title on the second most commonly occurring seal on the Acropole tablets is unclear.

The presence of the title EŠŠANA in the inscription is fascinating also when considered in relation to the figural imagery. The thematic similarity with PFS 93* ([Figure 32.2](#)), the heirloom seal of Kuraš the Anzanite, Son of Šešpeš, preserved in the Fortification archive at Persepolis, has generally been read from the direction of Susa. That is, Amiet no. 16 establishes the late Neo-Elamite heritage of the theme of hunter on horseback shooting at animals; the occurrence of a related theme, warrior on horseback shooting at enemies, on PFS 93* must then indicate that PFS 93* is derivative of "late Neo-Elamite glyptic." If, however, PFS 93* in fact dates earlier than Amiet no. 16 (Garrison 2011), and if PFS 93* reflects some attempt to articulate a nascent court style in the highlands associated with the Teispid line, Amiet no. 16 may then be derivative, an attempt to emulate this highland court style in the lowlands. The use of the title EŠŠANA in Amiet no. 16 may also emulate the inscription in PFS 93*.⁵⁷



[Figure 32.2 Seal of Kuraš the Anzanite, Son of Šešpeš, preserved in the Fortification archive at Persepolis \(PFS 93*\) \(line-drawing by M.B. Garrison; photograph of PFS 93* on PF 2033 \[reverse\]\).](#)

Amiet no. 17 (Delaporte 1920: Pl. 48, no. 12; Amiet 1973: 12)

A heroic encounter of the control type; the animals are held upturned, their heads not preserved. There is an inscription in the terminal field.⁵⁸ Amiet (1973: 12) remarked on the upturned animals, their vertical placement in the field, and the manner in which the winged figure holds them, the first two features of which he saw as pointing to Persepolis. Certainly the Fortification archive has many examples of heroes who hold animals/creatures upturned,⁵⁹

and Amiet was correct that the preferred disposition of the upturned animal/creatures is vertical rather than diagonal.⁶⁰ The fact that the hero appears to hold both of the animals' hindlegs is unusual; a nice parallel from Persepolis is PFS 1* (Cat.No. 182), which is carved in a similar style. Other noteworthy features are the four-winged hero (not uncommon at Persepolis) and the headgear that he wears. Amiet said that the head of the hero was "en partie effacée," but there are many nice details that are preserved. The figure clearly wears an elaborate headdress consisting of three short pointed extensions at the front of the forehead, a knob at the crown of the head, and one short pointed extension at the back of the head.⁶¹ The garment is double-belted. Amiet suggested that this may be a goddess, although he did not give any specific reasons as to why he thought this. The figure does not appear to have a beard (or, if there is one, it is cropped short). The form of the headdress is not exclusive to female deities; the scorpion-men on PFS 4* (Cat.No. 292) from Persepolis wear an almost identical headdress. On the same seal, the bearded hero wears a cap with a rounded knob at its crown; the bearded heroes on PFS 883* (Cat.No. 97) and PFS 1586 (Cat.No. 121) have a horn at the front of their headdresses. The carving is a very restrained miniaturist modeled style; the execution is very good and there is much detail.

Amiet no. 18 (Delaporte 1920: Pl. 48, no. 3; Amiet 1973: 13)

The composition appears to be a figure disposed to either side of a pole-like object. The figure at left is clearly winged (four wings); the one at right does not appear to have wings, but the preservation is poor. Amiet (1973: 13) suggested "atlantes ailés, à demi-agenouillés ... qui ne portent rien." Neither figure, however, is in the atlantid pose. The one at left is in a kneeling/running pose, one arm held out in front of his body, the other bent and held behind his body. The one at right appears to lift his forward leg; one arm is bent and held in front of his body, the other is straight and held behind his body. In between them is a pole-like object, perhaps some type of cultic implement/installation. The composition would appear to read as a scene of worship; there are traces of objects that cannot be resolved to the left and right of the main scene. The preservation of this seal is very poor; nevertheless, the carving is much better than indicated by Amiet's comments and drawing. It is executed in the miniaturist modeled style (note the swelling musculature in calves, thighs, and shoulders of the human figures).

Amiet no. 19 (Delaporte 1920: Pl. 48, no. 8; Amiet 1973: 13)

A human figure reaches out toward a caprid, perhaps to feed it. There is a paneled inscription in the field above the caprid.⁶² Amiet (1973: 13) thought that the figure was feeding the caprid

and related the scene to the ancient image of the priest-king and flocks/herds of the Uruk period. It is, however, extremely difficult to determine what exactly the human is doing. I could see no evidence of a stalk in his hand. The lower arm is awkwardly rendered as coming across or behind the body, and it extends all the way to the snout of the caprid. There are many examples of a human figure interacting with an animal in a non-threatening manner in Persepolitan glyptic. PFS 287 and PFS 1044 show a human figure reaching out to touch the snout of an animal.⁶³ The figure on Amiet no. 19 wears a double-belted ankle-length garment with a dagger sheath at its back. The garment type is common at Persepolis. The carving is very accomplished, yet another example of the miniaturist modeled style (note especially the puffy, rounded shoulders, segmented arms, and pinched waist of the human figure). The display of the inscription, in a panel in the upper field over the figural imagery, is very unusual; there are only a few examples of such a layout at Persepolis.⁶⁴

Amiet no. 20 (Amiet 1973: 13)

Crossed rampant animals (lions?); there is a rounded object (plant?) in the terminal field that cannot be resolved.⁶⁵ Crossed animals/creatures are very popular in Persepolitan glyptic.⁶⁶ The carving is the miniaturist modeled style, nicely executed. The attenuation of the animal bodies and swelling of the chests are hallmarks of related modeled styles at Persepolis.

Amiet no. 21 (Delaporte 1920: Pl. 48, no. 9; Amiet 1973: 13)

An archer shoots toward a fleeing animal. There is an inscription with one case line preserved in the terminal field.⁶⁷ The archer is in a kneeling/running pose. The theme and pose are extremely popular in Persepolitan glyptic.⁶⁸ The carving, miniaturist modeled style, is very good. At Persepolis these archer scenes, as Amiet no. 21, have an animated quality. The use of case line(s) without a panel for inscriptions is also well documented at Persepolis.⁶⁹

Amiet no. 22 (Amiet 1973: 13–14)

A horseman shoots a bow and arrow toward a fleeing animal. Amiet (1973: 13) provides only a few hasty comments on this seal, noting that it exhibits the same assured carving as the seals from the Acropole tablets. The scene is strikingly similar to Amiet no. 16 in its composition, iconography, and style. The animal ridden by the archer even has the same extended neck and possible non-equine head (this passage is, however, poorly preserved). The fleeing animal has an arrow protruding from its back. This trope is an interesting narrative device that is

commonly seen in Persepolitan glyptic.⁷⁰ The carving is miniaturist modeled style.

Amiet no. 23 (Amiet 1973: 13–14)

A winged creature marchant; there are objects which cannot be identified in the field to left and right of the winged creature. The impression is poorly preserved and the full composition cannot be resolved. Single animal/creature studies on cylinder seals are rare at Persepolis. As Amiet (1973: 13–14) noted, the seal is poorly executed. The segmentation of the chest of the creature calls to mind a similar convention employed in seals cut in the miniaturist modeled style at Susa; the carving is, however, quite flat.

Synopsis

I am even more struck than in 2006 by the high quality of the carving (the exception is Amiet no. 23) and stylistic consistency (almost exclusively miniaturist modeled style) within the glyptic corpora from Susa. These seals, with the exception of Amiet no. 23, are outstanding glyptic artifacts.⁷¹ As in Garrison (2006), I would emphasize the direct linkages in style, themes, and compositional formulae to Persepolitan glyptic.

Abbreviations

PFATS	seal preserved as impression(s) on Aramaic documents from the Persepolis Fortification archive.
PFS	seal preserved as impression(s) on Elamite documents from the Persepolis Fortification archive; seals carrying this siglum may also occur on Aramaic and/or uninscribed documents.
PFUTS	seal preserved as impression(s) on uninscribed documents from the Persepolis Fortification archive; seals carrying this siglum may also occur on Aramaic documents.
*	indicates an inscribed seal
s	indicates a stamp seal

Notes

¹ I would like to thank W.M.F. Henkelman for his readings of the Elamite inscriptions in this study and for his insights on Neo-Elamite history and culture in general. Many of the comments concerning late Neo-Elamite glyptic are based upon study of the seals preserved as impressions on the Persepolis Fortification archive. The study of this glyptic

material is made possible by the Persepolis Fortification Archive Project and its director M.W. Stolper, to whom I offer many thanks.

- [2](#) Despite the relative wealth of glyptic evidence for the Middle Elamite style, there remain many problems of chronology and iconology (cf. the comments of Matthews 1970: 3).
- [3](#) Potts (2016: 282–304) discusses in some detail the archaeological evidence for the very latest phase of the Neo-Elamite period. For general introductions to the Fortification archive, see Garrison and Root 2001; Henkelman 2008; Garrison 2017: 15–116.
- [4](#) Thirty-nine seals in total.
- [5](#) Note van Loon (1989: 447–448), who reconstructs two successive groups among these early seals, the faience seals carved in the “deep-line” style (that emerges directly from late Middle Elamite glyptic, Amiet 1972: nos. 2130–2145), followed by the bitumen seals “carved in a deeply gouged style with a new repertoire of motifs (griffins with sickle-shaped wings, et cetera: Susa 2126, 2127, and 2155).”
- [6](#) Cf. the remarks of Amiet 1972: 273.
- [7](#) Various and conflicting phases and dates have been proposed. Waters (2000: 33–34) concisely surveys the principal chronologies, proposed by Steve (1992), Malbran-Labat (1995), and Vallat (1996: 393, 1998a: 310). Potts (2016: 251–296), as most commentators, proposes three phases based principally on historical events and the sequencing of royal names: Neo-Elamite I (ca. 1000–744 BC), Neo-Elamite II (743–646 BC), and Neo-Elamite III (645–539 BC). Note de Miroshedji (1981 and 1990), who, based upon the archaeological evidence, posits only two phases for the period. Tavernier (2004) offers a detailed analysis of the problems and conflicts involved in establishing a coherent list of kings in Elam for the first millennium BC (responding principally to Vallat 1995b, 1996, 1998a, 1998b, and 2002). For an archaeological perspective from Susa, see the magisterial survey of Steve, Vallat, and Gasche (2002: cols. 470–485), who also propose a tripartite division of the Neo-Elamite period at Susa but with substantially different dates than Potts. Henkelman (2008: 4–28) provides a summary of the issues. Carter (2011) surveys the principal archaeological data for the whole of Elam in the Neo-Elamite period.
- [8](#) See Amiet (1967 [glazed architectural decoration] and 1973 [glyptic]) and de Miroshedji (1982, 1985) for the initial suggestions of a revived polity at Susa (see also de Miroshedji 1990). Henkelman (2003, 2008: 2–57) has argued forcefully for this scenario. For surveys of the evidence and conflicting opinions, see Álvarez-Mon, Garrison, and Stronach (2011) and Potts (2016: 282–296).
- [9](#) For similar suggestions of Elamite-Iranian acculturation, see Steve 1991; Amiet 1992; Álvarez-Mon 2015.
- [10](#) Seals: Amiet 1973: nos. 1–16 (Acropole) and 17–23 (Apadana). Hereafter, I refer to these seals simply as Amiet no. 1, Amiet no. 2, etc. Acropole texts: Scheil 1907: 1–202, nos. 1–298 and 1911: 101, no. 309; Jusifov 1963a and 1963b. Apadana texts: Scheil 1911: 93–100, nos. 301–307. There are many fragments of tablets, most likely from the Acropole archive (to judge by the occurrence of some of the same seals as found on the Acropole tablets), in storage in the Louvre. Single impressions of all the seals except Amiet nos. 2, 12, 20, 22, and 23 were published in low quality photographs in Delaporte 1920: Pl. 48, nos. 1–19 (two impressions of Amiet no. 5 were published [Delaporte 1920: Pl. 48, nos. 14 and 19]).
- [11](#) Henkelman (2008: 6 note 10) surveys the opinions.
- [12](#) Note also Amiet (1992: 92), where he places the “seal” on the Persepolis Bronze Plaque with the late Neo-Elamite glyptic

corpus.

- [13](#) Another cluster of seals from Susa (Amiet 1972: 2160–2179) appears to be principally imports from Assyria and Babylonia or so heavily Assyrianizing/Babylonianizing that one can hardly tell whether they are imports or local products (nos. 2167 and 2167bis are impressions on clay documents). Amiet (1972: 274) dated the cylinder seals from this group to the late 8th–early 7th centuries BC. The cylinders include, as one would expect, several heroic encounters (nos. 2163, 2166, 2167, 2176bis). The stamp seals, not surprisingly, carry the so-called late Babylonian worship scene (nos. 2172–2175 and 2177) or Assyro-Babylonian religious emblems (nos. 2176, 2178–2179). The exception is no. 2168, a bronze stamp-pendant with double Pazuzu heads, which shows a caprid and crescent; the style seems quite coarse.
- [14](#) For an introduction to the texts and seals from the Fortification archive, see Garrison and Root 2001; Henkelman 2008: 65–179; Garrison 2017: 15–116. Seals from Persepolis followed by Cat.No. cited in the following discussions refer to the catalogue numbers in Garrison and Root 2001.
- [15](#) I want to thank Dr. Béatrice Andre-Salvini, former curator of the ancient Near Eastern collections in the Louvre, who facilitated my research on these tablets.
- [16](#) The Treasury archive from Persepolis, dated by date formulae in the Elamite documents to year 30 of Darius I through year 7 of Artaxerxes I (492–457 BC), concerns payments of silver from the Treasury in lieu of partial or full commodity rations (sheep, wine, and grain) to workers involved in construction projects (presumably) at Persepolis and the surrounding area. The Treasury archive is much smaller than the Fortification archive but still preserves a substantial glyptic corpus consisting of 77 distinct seals; 43 cylinder seals and 34 stamps/signets. On the seals from the Treasury archive, see Garrison (2017: 71–77); the seals from the Treasury archive were originally published in Schmidt 1957: 4–41, Pls. 3–14.
- [17](#) For the style, see the discussion in Garrison 2000: 129–134.
- [18](#) As Amiet (1973: 8) noted, the inscription on Amiet no. 6 is an entreaty to Marduk and Nabû written in Babylonian.
- [19](#) See the discussion below.
- [20](#) Garrison 2017: 102.
- [21](#) Amiet nos. 6, 8, 9, 10, 11, 12, 13, 15, 16, 17, 19, 21.
- [22](#) Discussed in Garrison (2017: 76–77): PTS 1*, PTS 2*, PTS 3*, PFS 113*/PTS 4*, PTS 6*, PTS 8*, PTS 14*, PTS 24*, PFS 71*/PTS 33*.
- [23](#) For example, PFS 429 (Cat.No. 7), PFS 1387 (Cat.No. 72), PFS 1458 (Cat.No. 80), PFS 1641 (Cat.No. 18).
- [24](#) Garrison 2000: 129–134. For specific Persepolitan seals that combine the uplifted leg with a scimitar held down behind the body, see, for example, PFS 57* (Cat.No. 239), PFS 98* (Cat.No. 217), PFS 149 (Cat.No. 212), PFS 236 (Cat.No. 213), PFS 815* (Cat.No. 215), PFS 1566* (Cat.No. 218), PFATS 437. For specific Persepolitan seals that combine the confronting pose with a scimitar held down behind the body, see, for example, PFS 33 (Cat.No. 220), PFS 526* (Cat.No. 216), PFS 1367s (Cat.No. 211), PFS 2970, PFUTS 391, PFUTS 506, PFATS 35.
- [25](#) Note also the ostriches in the control heroic encounter on PFS 29 (Cat.No. 302).
- [26](#) See the examples cited above, note 24.
- [27](#) Garrison 2013: 585–586.
- [28](#) Discussed in Garrison in press.
- [29](#) For example, PFS 12a, PFS 12b, PFS 216, PFS 310, PFS 706*, PFS 1572.

- [30](#) Our copy of the inscription confirms Amiet's reading.
- [31](#) I count 124 tablets.
- [32](#) At Persepolis there is only one seal that has a similar rendering of the stylized tree, PFS 2266.
- [33](#) PFS 2089* has a similar archaizing quality. Amiet (1973: 9) was convinced that his seal no. 6 was a 7th century BC Babylonian product. He hypothesized that the small worshiper may have been added to the design only when the seal was used at Susa. The Babylonian inscription is certainly a striking feature of this seal within the context of the Susa glyptic corpus, and the overall quality of the carving and iconographic detail is rather more elaborate than the other Assyrianizing products at Susa (and Persepolis); following Amiet, the seal may indeed be an import. I would suggest, however, that the composition indicates an Assyrian milieu (the scene is rare in Babylonian contexts). The seal may be some type of sophisticated blend of Assyrian and Babylonian elements (perhaps pointing toward Susa rather than Babylonia as its place of origin).
- [34](#) PFATS 45, PFS 442, PFS 2361, and PFUTS 123s.
- [35](#) I was able to read only the DUMU sign in the inscription (cf. the reading in Amiet 1973: 27: ... / *šak an* ... / *ú* ...).
- [36](#) Amiet (1973: 10) suggested that the figure holds "des tiges auxquelles peuvent être attachés trois globules; ces tiges semblent tenir la place des cordons terminés parfois par un fruit, qui tombent du disque ailé."
- [37](#) See the discussion above for Amiet no. 3.
- [38](#) I was able to read only a few broken signs (cf. Amiet 1973: 27, "(i)nscription effacée").
- [39](#) As with the previous inscription, I was able to read only a few broken signs (cf. Amiet 1973: 27, "(i)nscription illisible").
- [40](#) I was unable to improve on the reading in Amiet (1973: 28): ^{DIŠ AN}*hu-* / *pan* ... / [DUMU] ... / ... -*na*.
- [41](#) I was able to read a few broken signs in four lines (cf. Amiet 1973: 28, "(i)nscription effacée").
- [42](#) I was able to see only parts of the inscription panel and one case line (cf. Amiet 1973: 28, "(i)nscription effacée").
- [43](#) Possible three figures: PFUTS 57; possible archer: PFS 2170. Both seals are, however, poorly preserved. See also the comments below, note 44, concerning PFUTS 603*, which may have had an archer.
- [44](#) Merrillees 2005: 52–53 (no. 16). There appears to be a replica of this seal at Persepolis, PFUTS 603, although only the driver, horse, figure in winged disk, and date palm are preserved (see Garrison 2014: 90, figs. 7.28–29).
- [45](#) For example, PFATS 596, PFS 311, PFS 718, PFS 2170, PFS 2622, PFS 2663.
- [46](#) For archer scenes in Persepolitan glyptic, see Garrison 2010.
- [47](#) The Assyrian evidence is discussed by Collon 2001: 59–63.
- [48](#) Amiet (1973) does not appear to have recognized that the seal is inscribed. I could read clearly only one sign, DUMU, and a broken sign under the DUMU. The evidence suggests that the original inscription read: PN₁ DUMU PN₂ (see Garrison [2006: 70–72] for inscriptional formulae at Persepolis).
- [49](#) For example, the lion and bull hunts (slabs B-19 and B-20) and the warfare scenes (slabs B-3 – B-8, B-10, B-11, and B-27) in throne room B in the palace of Aššurnasirpal II at Nimrud (Meuszyński 1981: Pls. 1–3); the famous lion hunts in room C in the palace of Assurbanipal at Nineveh (Barnett 1976: Pls. 8, and 10–12).
- [50](#) Chariots depicted on the Apadana reliefs at Persepolis are, however, configured similarly to the chariot on Amiet no. 15. These chariots include both those in the delegations of the subject peoples (e.g., Schmidt 1953: Pls. 32 and 48) and the so-called king's chariots (Schmidt 1953: Pl. 52).
- [51](#) This is, in fact, quite noteworthy given the large number of chariot scenes that survive at Persepolis.

- [52](#) Amiet (1994: 63) briefly brought into the discussion the two remarkable seals from Nineveh that show mounted hunters (spears rather than bow and arrow); these two Assyrian seals, and the Assyrian connections of PFS 93* in general, are discussed in detail in Garrison 2011: *passim*, 397–399, Figure 36 (for the two seals from Nineveh).
- [53](#) Amiet (1973: 12) described the tail as “la queue nouée en son milieu.”
- [54](#) I would reiterate (Garrison 2011: 381–383) that stylistically Amiet no. 16 is quite different from PFS 93*. Amiet no. 16 comes out of the miniaturist modeled style but has much abstract detail. In comparison, PFS 93* and its companion PFS 51 are much more heavily modeled with no abstract detail work.
- [55](#) I thank W.H.M. Henkelman for his reading of the inscription. He writes (pers. comm.) that “the last PN strikes me as very odd, it cannot be correct like this; maybe the reading direction is boustrophedon, but that does not make it much better. *ur/taš* could also be the end of the first part of a name, *Sunki-ur*. The sign I read as *še* could perhaps be UG, if there are five wedges (two at the bottom instead of one long one); if the last sign is incomplete it could be *eh* (one of the values of *ah*): *taš-še-eh-na*. Not an Elamite name, but Andada seems equally unfamiliar.” Working from Lambert’s transcription in Amiet (1973), Vallat (1995a) suggested that the inscription on Amiet no. 16 is retrograde: *Da-da DUMU taš-še-ak-na*. This interpretation now seems unlikely.
- [56](#) Assuming that the word is in fact a title and not part of a personal name (see above, note 55).
- [57](#) The exact interpretation and significance of the inscription on PFS 93* are issues of much discussion. Henkelman (this volume) briefly reviews some of this scholarship. He, rightfully in my opinion, stresses the strategic and ideological importance of ‘Anšan/Anzan’ in Teispid titulature.
- [58](#) The inscription is nicely executed. Three lines are preserved in the terminal field without case lines or a panel. Amiet (1973: 28) read: ... / *gaz-za* / *ak-* / [*p*]è-*na*. I could see no evidence of the [*p*]è.
- [59](#) Garrison and Root 2001: 256–281.
- [60](#) Although there are examples where the upturned animals/creatures are disposed diagonally in the field, for example, PFS 64* (Cat.No. 173), PFS 234 (Cat.No. 188), PFS 885 (Cat.No. 187).
- [61](#) Cf. Amiet 1973: 12: “une tiare à cornes en forme de casque arrondi.”
- [62](#) I could read no more of the inscription than Amiet (1973: 28): ... / DUMU ... / *ti-na*.
- [63](#) The style of PFS 287 is, however, clearly not local.
- [64](#) Notably PFS 83* and PFS 1568*, discussed at length in Garrison 2017: 333–349, 366–373.
- [65](#) The one impression of the seal is very poor.
- [66](#) Amiet (1973: 13) noted the occurrence of the theme at Persepolis. He would have been unaware of the large number of examples that exist (see Garrison 2006).
- [67](#) I could read three broken signs in two lines (cf. Amiet [1973: 28]: “illisible”).
- [68](#) See Garrison 2010.
- [69](#) Most notably, PFS 4* (Cat.No. 292).
- [70](#) Note especially the famous PFS 51, the companion seal of PFS 93* (Garrison 2006: 383–390, Figures 14–19).
- [71](#) Cf. the comments of Amiet 1973: 25; de Miroschedji 1982: 63.

References

- Álvarez-Mon, J. 2015. Platforms of Exaltation: Elamite Sculptural Reliefs from the Highlands: Kūl-e Farah VI. *Elamica* 4: 1–48.
- Álvarez-Mon, J., Garrison, M.B. and Stronach, D. 2011. Introduction. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*. Winona Lake: Eisenbrauns, 1–32.
- Amiet, P. 1967. Éléments émaillés du décor architectural néo-élamite. *Syria* 44: 27–46.
- . 1972. *Glyptique susienne des origines à l'époque des Perses achéménides: cachets, sceaux-cylindres et empreintes antiques découverts à Suse de 1913 à 1967*. Mémoires de la Délégation archéologique en Iran 43. Paris: P. Geuthner.
- . 1973. La glyptique de la fin de l'Élam. *Arts Asiatiques* 28: 3–32.
- . 1992. Sur l'histoire élamite. *Iranica Antiqua* 27: 75–94.
- . 1994. Quelques sceaux élamites. In: Gasche, H. and de Meyer, L. (eds.) *Cinquante-deux réflexions sur le Proche-Orient ancien: offertes en hommage à Léon De Meyer*. Mesopotamian History and the Environment Occasional Publications 2. Ghent: University of Ghent, 59–66.
- . 1996. Observations sur les sceaux der Haft Tépe (Kabnak). *Revue d'Assyriologie et d'Archéologie Orientale* 90: 135–143.
- . 1999. Les sceaux de Kabnak (Haft Teppah). In: Alizadeh, A., Majidzadeh, Y. and Shahmirzadi, S.M. (eds.) *The Iranian World: Essays on Iranian Art and Archaeology Presented to Ezat O. Negahban*. Tehran: Iran University Press, 101–113.
- . 2000. Glanes élamites. In: Dittmann, R. et al. (eds.) *Variatio Delectat, Iran und der Westen: Gedenkschrift für Peter Calmeyer*, Alter Orient und Altes Testament 272. Münster: Ugarit-Verlag, 1–8.
- Barnett, R.D. 1976. *Sculptures from the North Palace of Ashurbanipal at Nineveh (668–627)*. London: British Museum Publications Limited.
- Carter, E. 2011. Elam ii. The Archaeology of Elam. *Encyclopædia Iranica*, VIII/3, pp. 313–335; available online at www.iranicaonline.org/articles/elam-ii (accessed 23 September 2016).
- Collon, D. 2001. *Catalogue of Western Asiatic Seals in the British Museum: Cylinder Seals V: Neo-Assyrian and Neo-Babylonian Periods*. London: The British Museum Press.
- Delaporte, L. 1920. *Catalogue des cylindres, cachets et pierres gravées de style oriental [du] Musée du Louvre: vol. 1: Fouilles et missions*. Paris: Librairie Hachette.
- de Miroschedji, P. 1981. Prospections archéologique au Khuizstan en 1977. *Cahiers de la Délégation archéologique française in Iran* 12: 169–174.
- . 1982. Notes sur la glyptique de la fin de l'Élam. *Revue d'Assyriologie et d'Archéologie Orientale* 76: 51–63.
- . 1985. La fin du royaume d'Anšan et Suse et la naissance de l'empire perse. *Zeitschrift für Assyriologie* 75: 265–306.
- . 1990. La fin de l'Élam: essai d'analyse et d'interprétation. *Iranica Antiqua* 25: 47–95.
- Garrison, M.B. 2000. Achaemenid Iconography as Evidenced by Glyptic Art: Subject Matter, Social Function, Audience and Diffusion. In: Uehlinger, Ch. (ed.) *Images as Media: Sources for the Cultural History of the Near East and the Eastern Mediterranean (1st Millennium BCE)*, Orbis Biblicus et Orientalis 175. Fribourg: University Press, 115–164.
- . 2006. The 'Late Neo-Elamite' Glyptic Style: A Perspective from Fars. *Bulletin of the Asian Institute* 16: 65–102.
- . 2010. Archers at Persepolis: The Emergence of Royal Ideology at the Heart of the Empire. In: Curtis, J. and Simpson, St. John (eds.) *The World of Achaemenid Persia: History, Art and Society in Iran and the Ancient Near East*. London: I.B. Tauris, 337–368.

- . 2011. The Seal of 'Kuraš the Anzanite, Son of Šešpeš' (Teispes), PFS 93*: Susa – Anšan – Persepolis. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*. Winona Lake: Eisenbrauns, 375–405.
- . 2013. Royal Achaemenid Iconography. In: Potts, D.T. (ed.) *Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press, 566–595.
- . 2014. Royal-Name Seals of Darius I. In: Henkelman, W.F.M., Jones, C.J. and Wood, C. (eds.) *Extraction and Control: Studies in Honor of Matthew W. Stolper*, Studies in Ancient Oriental Civilizations 68. Chicago: The Oriental Institute of the University of Chicago, 67–104.
- . 2017. *The Ritual Landscape at Persepolis: Glyptic Imagery from the Persepolis Fortification and Treasury Archives*, Studies in Ancient Oriental Civilizations 72. Chicago: The Oriental Institute of the University of Chicago.
- . in press. Visual Representation of the Divine and the Numinous in Early Achaemenid Iran: Old Problems, New Directions. In: Uehlinger, Ch. and Graf, F. (eds.) *Iconography of Ancient Near Eastern Religions. Volume I: Pre-Hellenistic Periods, Introductory Essays*. Leiden: Brill Academic Publishers.
- Garrison, M.B. and Root, M.C. 2001. *Seals on the Persepolis Fortification Tablets: Volume I: Images of Heroic Encounter*, Oriental Institute Publications 117. Chicago: University of Chicago Press.
- Harper, P.O., Aruz, J. and Tallon, F. (eds.) 1992. *The Royal City of Susa: Ancient Near Eastern Treasures in the Louvre*. New York: Metropolitan Museum of Art.
- Henkelman, W.F.M. 2003. Persians, Medes and Elamites: Acculturation in the Neo-Elamite Period. In: Lanfranchi, G.B., Roaf, M. and Rollinger, R. (eds.) *Continuity of Empire(?): Assyria, Media, Persia*, History of the Ancient Near East Monographs 5. Padova: S.a.r.g.o.n. Editrice e Libreria, 181–248.
- . 2008. *The Other Gods Who Are: Studies in Elamite-Iranian Acculturation Based on the Persepolis Fortification Texts*, Achaemenid History 14. Leiden: Nederlands Instituut voor het Nabije Oosten.
- . 2011. Cyrus the Persian and Darius the Elamite: A Case of Mistaken Identity. In: Rollinger, R., Truschnegg, B. and Bichler, R. (eds.) *Herodot und das persische Weltreich/Herodotus and the Persian Empire: Akten des 3. Internationalen Kolloquiums zum Thema "Vorderasien im Spannungsfeld klassischer und altorientalischer Überlieferungen"* Innsbruck, 24. – 28. November 2008, Classica et Orientalia 3. Wiesbaden: Harrassowitz Verlag, 577–634.
- Jusifov, J.B. 1963a. Эламские хозяйственные документы из Суз: транскрипция, перевод и комментарий [Elamite economic documents from Susa. Transcription, translation and commentary]. *Vestnik Drevnej Istorii* 84 (1963.2): 191–222.
- . 1963b. Эламские хозяйственные документы из Суз: транскрипция, перевод и комментарий [Elamite economic documents from Susa. Transcription, translation and commentary]. *Vestnik Drevnej Istorii* 85 (1963.3): 200–261.
- Liverani, M. 2003. The Rise and Fall of Media. In: Lanfranchi, G.B., Roaf, M. and Rollinger, R. (eds.) *Continuity of Empire(?): Assyria, Media, Persia*, History of the Ancient Near East Monographs 5. Padova: S.a.r.g.o.n. Editrice e Libreria, 1–12.
- Malbran-Labat, F. 1995. *Les inscriptions royales de Suse: briques de l'époque paléo-élamite à l'empire néo-élamite*. Paris: Réunion des musées nationaux.
- Matthews, D.M. 1970. *Principles of Composition in Near Eastern Glyptic of the Later Second Millennium B.C.*, Orbis Biblicus et Orientalis, Series Archaeologica 8. Freiburg/Göttingen: Universitätsverlag/Vandenhoeck & Ruprecht.
- Merrillees, P.H. 2005. *Catalogue of the Western Asiatic Seals in the British Museum, Cylinder Seals VI, Pre-Achaemenid and*

- Achaemenid Periods*. British Museum Press. London.
- Meuszyński, J. 1981. *Die Rekonstruktion der Reliefdarstellungen und ihrer Anordnung im Nordwestpalast von Kalḫu (Nimrūd) (Räume B.C.D.E.F.G.H.L.N.P.)*, Baghdader Forschungen 2. Mainz Am Rhein: Verlag Philipp Von Zabern.
- Muscarella, O. 1981. Surkh Dum at the Metropolitan Museum of Art: A Mini-Report. *JFA* 8/3: 327–359.
- Negahban, E.O. 1991. *Excavations at Haft Tepe, Iran*, University Museum Monographs 70. Philadelphia: University Museum of Archaeology and Anthropology, University of Pennsylvania.
- Porada, E. 1970. *Tchoga Zanbil (Dur Untash) IV: La glyptique*, Mémoires de la Délégation archéologique en Iran 42. Paris: P. Geuthner.
- . 1993. Cylinder Seals. *Encyclopædia Iranica* VI/5: 479–505.
- Potts, D.T. 2016. *The Archaeology of Elam: Formation and Transformation of an Ancient Iranian State*. Second Edition. Cambridge: Cambridge University Press.
- Scheil, V. 1907. *Textes élamites-anzanites, troisième série*, Délégation en Perse, Mémoires 9. Paris: Ernest Leroux Éditeur.
- . 1911. *Textes élamites-anzanites, quatrième série*, Délégation en Perse, Mémoires 11. Paris: Ernest Leroux Éditeur.
- Schmidt, E. 1953. *Persepolis I. Structures, Reliefs, Inscriptions*, Oriental Institute Publications 68. Chicago: University of Chicago Press.
- . 1957. *Persepolis II: The Contents of the Treasury and Other Discoveries*, Oriental Institute Publications 69. Chicago: University of Chicago Press.
- Steve, M.-J. 1991. Elam: Histoire continue ou discontinue? In: De Meyer, L. and Gasche, H. (eds.) *Mésopotamie et Elam: actes de la XXXVI^{ème} Rencontre assyriologique internationale, Gand, 10–14 juillet 1989*, Mesopotamian History and the Environment Occasional Publications 1. Ghent: University of Ghent, 1–9.
- . 1992. *Syllabaire élamite: histoire et paléographie*, Civilisations du Proche-Orient, Serie II, Philologie 1. Neuchâtel: Recherches et Publications.
- Steve, M.-J., Vallat, F. and Gasche, H. 2002. Suse. *Supplément au Dictionnaire de la Bible* 74: 359–651.
- Tavernier, J. 2004. Some Thoughts on Neo-Elamite Chronology. *ARTA* 2004.003: 1–44.
- . 2011. Iranians in Neo-Elamite Texts. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*. Winona Lake: Eisenbrauns, 191–261.
- Vallat, F. 1995a. Une inscription élamite écrite de droite à gauche! *NABU* 1995–45.
- . 1995b. Šutruk-Nahunte, Šutur-Nahhunte et l’imbroglio néo-élamite. *NABU* 1995–44.
- . 1996. Nouvelle analyse des inscriptions néo-élamites. In: Gasche, H. and Hrouda, B. (eds.) *Collectanea Orientalia: histoire, arts de l’espace et industrie de la terre: études offertes en hommage à Agnès Spycket*, Civilisations du Proche-Orient, Serie I, Archéologie et environnement 3. Neuchâtel: Recherches et Publications, 385–395.
- . 1998a. Elam i. The History of Elam. *Encyclopædia Iranica*, VIII/3, 301–313.
- . 1998b. Le royaume élamite de Zamin et les “lettres de Ninive.” *Iranica Antiqua* 33: 95–106.
- . 2002. Review of M.W. Waters, *A Survey of Neo-Elamite History* (2000). *Orientalische Literaturzeitung* 97: 372–376.
- Van Loon, M.N. 1988. Two Neo-Elamite Cylinder Seals with Mounted Huntsmen. *Iranica Antiqua* 23: 221–226.
- . 1989. Iron Age Cylinder and Stamp Seals. In: Schmidt, E.F., van Loon, M.N. and Carvers, H.H. (eds.) *The Holmes Expedition to Luristan*, Oriental Institute Publications 108. Chicago: The Oriental Institute of the University of Chicago,

413–474.

Waters, M.W. 2000. *A Survey of Neo-Elamite History*, State Archives of Assyria Studies 12. Helsinki: Neo-Assyrian Text Corpus Project.

CHAPTER THIRTY-THREE

Elamite dress and textiles¹



Trudy S. Kawami

Introduction

The study of Elamite dress and textiles provides a view of the complicated world of Elam that supplements the more familiar archaeological remains of stone, metal, clay and ceramic. Most of the documents for dress are two-dimensional representations in stone or engravings on small cylinder seals. A few written references to dress and textiles occur in cuneiform texts, but most are lists or receipts merely mentioning the fiber, usually wool or linen. Actual evidence of the fibers themselves is limited to pseudomorphs preserved on corroded metal, and in only one case, an actual textile. Representations of textiles are a poor substitute for the actual work. We cannot examine the fibers, explore the cut, or feel the “hand” of the fabric. We cannot say with certainty if the garments are cut or wrapped, fitted or merely cinched tight; if the décor is appliqued, embroidered or woven. Nor can we see their colors or appreciate the garments in motion, a major aspect of their appearance.

Elamite dress may be divided into two basic categories, divine and human. Divine dress may be marked by archaisms but can also reflect cultural influences from outside Elam. We cannot take divine garments as examples of dress that was actually worn by living individuals. Written accounts detail the existence and care of actual garments made for divine images in Mesopotamia, and we know their production and décor involved many craftspeople (Zawadzki 2006; Neumann 2017). We may assume the same for divine garments in Elam. Human garments can be divided between those worn by individuals of high rank and more ordinary garments. These last are rarely depicted in any detail, as they signified neither the status nor power of those commissioning the art works.

Proto-literate/proto-Elamite period (ca. 3200–2900 BCE)

Without written evidence, we cannot document Elamite-speaking people at the turn of the 4th millennium BCE (the Protoliterate/Jemdet Nasr Period) in Iran. Nonetheless, we know a little

of the dress and textiles of this period. Our evidence comes primarily from the great city of Susa in the lowlands of Khuzistan, a city that was already a metropolis of impressive size in the 4th millennium BCE (Potts 2016: 49–53; Harper et al.1992: 4–5, 26–31). Figures wrapped in long smooth robes were engraved on small stone cylinder seals and also survive in the impressions of such seals. A few small stone sculptures show kneeling figures with smooth robes wrapped around them, only the soles of their feet visible at the back. The assumption has been that these are priestesses or worshippers (Harper et al. 1992: 58–59, 62–63).

The most detailed depiction of a garment is found on the kneeling silver bull, now in the Metropolitan Museum of Art, New York (Harper et al.1992, Figure 5). The smooth garment wrapping around the legs and body has narrow stripes that alternate between plain and stepped bands. The edge of the garment has a fine narrow fringe running diagonally from under the proper left arm to the proper right knee. The corner of this garment, curving around the proper right knee has a broad, fan-like tassel at its corner. This is the earliest clear example of fringe, a decorative aspect of Elamite dress that will be seen for millennia. It is impossible to tell if the stripes of the garment are woven, embroidered or perhaps pieced from narrow strips. But we can appreciate the effect of what must have been a sumptuous, sophisticated textile. The being wearing this garment is neither mundane nor mortal but a supernatural creature of power and importance (Hansen 1970). Thus we are justified in considering this divine dress.

In contrast to this numinous image, the heroic, presumably princely, male figures depicted in some seal impressions from Susa wear a short kilt with a thick rounded belt (Harper et al. 1992: 52, Figure 28). The same garb is worn by similar figures in Mesopotamian glyptic (Braun-Holzinger 2007: 11–12, Pls. 5–9; Moortgat 1969, Pl. 14). Even before we are sure we have Elamite-speaking people, we can see a distinction between divine and human dress in southwestern Iran, as well as the presence of some Mesopotamian elements.

The fiber from which these clothes were fashioned was probably linen. Flax was cultivated and woven in southern Mesopotamia and appears in lists of woven textiles as early as 3300 BCE (Szarzyn'ska 2002: 36, 42; for the antiquity and widespread exploitation of plant-derived fibers in the Ancient Near East see Barber 1991: 10–15; Good 1998: 657; Bier 1995: 1578). Contemporaneous linen pseudomorphs on a copper axe from Susa and Tepe Sialk in north-central Iran give further evidence of its widespread use before the later 3rd millennium BCE (Kawami 1992a: 7–8). Slightly later, mid-3rd millennium BCE texts from Tello in Mesopotamia refer to “Susian” flax being grown in southern Mesopotamia (Potts 2012: 51). Given the warm and humid climate of Khuzistan, one can see how linen, which is lightweight and breathes, could be a fiber of choice. Wool of course is also a possibility, and was a documented export to Mesopotamia before the Akkadian period (Potts 2016: 84). Wool was used for 90% of the textiles in the records of the Third Dynasty of Ur in later Mesopotamia (Zawadzki 2006: 23), so the copious use of linen may be an Elamite characteristic. The late 4th

millennium BCE also provides the earliest representation of the ground loom in Iranian art (Bier 1995: 1574; Kawami 1992: 8).

The 3rd millennium BCE

By the late 3rd millennium BCE, Elamite-speaking people are clearly the ruling elite in the lowlands of Khuzistan. Their garb and that of their deities at Susa seems to have followed Mesopotamian styles (Harper et al. 1992: 83). A seated stone sculpture of the goddess Narundi commissioned by Puzur-Inshushunak, governor (*ensi*) of Susa and the last king of Awan, probably a region in the mountains of western Iran, about 2100 BCE (Harper et al. 1992: 90–92, No. 55; Potts 2008: 188–190; 2016: 112–117), is almost identical to Mesopotamian divine images (Harper et al. 1992, Figure 5). The goddess wears long robes covered with horizontal rows of long flounces or perhaps lappets, with slightly pointed ends. This flounced garment has been called a *kaunakes*, a Greek term for a fleecy sheep's hide, but it is unlikely that the gods were thought of as wearing stiff, heavy, hairy hides given that linen is well documented earlier, as were wool textiles.

The construction of these flounced garments,² clothing that could ripple and flow over the bodies that they covered, is unknown. The rows of flounces could be applied individually as tufts of fiber, produced in long bands of fringe, trimmed into patterns and then appliqued, or woven in versions of looped pile, cut-loop or knotted pile and then trimmed in a variety of ways.³ Whatever the construction, the Susa garment would be equally appropriate in Mesopotamia. The horned headgear of the goddess is based on the model developed in Mesopotamia in the Akkadian period (Amiet 1992). Aside from the Elamite inscription, and perhaps the multiple earrings, there is little to distinguish this sculpture from a Mesopotamian product.

A very different type of garment is worn by the interceding/praising goddess on a now-fragmentary relief commissioned by Puzur-Inshushinak (Harper et al. 1992: 88, No. 54). Instead of horizontal flounces, her garment looks as if it had either long thin vertical pleats or perhaps stripes like that on the kneeling silver bull. They run uninterrupted from the top of her garment to the hem, the lines broken only by her bare arms. The hem of the garment ends above the feet, flaring out slightly at each side. Some male deities wore similar clothing (Amiet 1972: Pl. 148, 1567).

The influence of Mesopotamian fashion is also seen in the garb of Puzur-Inshushinak himself, to judge from his inscribed stone sculpture [Figure 33.1]. He wears a long smooth robe with an elaborately knotted fringe along its finished edge that falls down his proper left side. Elaborate borders featuring fringe tied into discreet sections terminating in square knots, or perhaps beads are best known from the sculptures of the Akkadian ruler Manishtusu (2269–

2255 BCE) (Harper et al. 1992: 166; Moortgat 1969, Pls. 141, 142, 148, 149). Susa was ruled by Akkadian governors during the previous centuries and the adoption of Akkadian princely dress by subsequent Elamite rulers like Puzur-Inshushinak would not be surprising.

Another work dated to the time of Puzur-Inshushinak is a beautiful silver beaker found in an uncontrolled situation on the Marv Dasht plain near Persepolis (Harper et al. 1992: 8, Figure 9; Potts 2008: 165–171; Pittman 2002: 224–227). The beaker depicts two female figures, one standing and one seated as if on the ground, each wearing a voluminous garment. This robe or gown is covered with evenly spaced tapered flounces, or perhaps appliqued lappets, forming an all-over diamond pattern. Both figures also have a band of long undulating fringe in thin triangular segments that encircles the neck, extending over the shoulders. A second similar band, or perhaps an extension of the first, curves around the waist, draping diagonally across the standing figure. On the seated figure, this element is nearly obscured by the curve of the covered left arm but is clearly differentiated from the diamond pattern on the rest of the garment (Potts 2008: 167–168, Figs. 2 and 3). Both garments have long sleeves that taper to an angled edge well above the wrist. The garments shown on the silver beaker are distinct from the Mesopotamian examples in that the flounces are not arranged in regular horizontal rows but cover the field of the garment in an even pattern. The sleeves, too, are not known elsewhere. The beaker's find spot has suggested to some that it depicts the garb of highland divinities and illustrates a tradition distinct from that of lowland Susa. But the garments on the Marv Dasht beaker find closest parallels in the BMAC culture of Central Asia. Three seated stone female figures and a seated female on a silver seal-pin from Gonur wear voluminous flounced robes and have the same band of differentiated fringe around the neck and waist (Potts 2008: 185: 177, Figs. 11 and 15; Sarianidi 2002: 142, 231). Other unprovenanced pieces from the region show the same detail, for instance, Louvre AO 22918. Another distinctive feature of the dress on the Marv Dasht beaker is the hem that trails behind the wearer as if the garment were longer in back than in front. This characteristic is also unknown in Mesopotamian representations. The trailing hem combined with the delicate bare feet poking from beneath give both figures a distinctive animation. Potts (2008: 180–186) has suggested that the beaker itself is a BMAC product, perhaps from Gonur, receiving its Elamite inscription only after being sent to Puzur-Inshushinak as a diplomatic gift or in trade. The inscription on the seated sculpture of Puzur-Inshushinak described people from Shimashki bringing tribute; perhaps the gifts included a silver beaker.



[Figure 33.1 The garb of Puzur-Inshushinak \(photographs by J. Álvarez-Mon\).](#)

Possible influence of works like the Marv Dasht beaker has been noted in seals of the Elamite “common style” (Amiet’s “popular Elamite”), now called “highland” or Anshanite, that appear in Elamite glyptic art directly after the time of Puzur-inshushinak (Potts 2008; 2016: 188–192; Pittman 2002: 221–224, 231). One notable exemplar is a cylinder seal belonging to Ebarat, a king of Awan in the 21st or 20th century BCE (Harper et al.1992: 114, Figure 73). Whether the figures in the seal are human or divine, their garb differs markedly from that of the previous period.

A striking Elamite copper male head of unclear provenance and now in the Metropolitan

Museum of Art, New York, has also been dated to this period (Harper et al.1992: 176, Figure 49; Pittman 2002: 187; Muscarella 1988: 368–374). Of particular interest is its unusual headgear; it is not a turban, though it may look like that from the front. When viewed from the side or rear, one can make out an arrangement of bands that seem to loop over and through the hair, seeming to secure a patterned segment on the back of the head. It may be a male parallel to the band worn by the standing female on the Marv Dasht beaker, and perhaps a more naturalistic representation of the headband worn by two small figures from Susa (Pitman 2003: 187).

Earlier 2nd millennium (Old Elamite, 1900–1500 BCE)

While the late 3rd millennium saw varied currents of influence from both Mesopotamia and Central Asia in Elamite dress, the earlier 2nd millennium BCE, the time of the *sukkalmahs* or grand regents at Susa and Anshan, saw the development of distinct forms of dress that would persist into the first millennium BCE. The garb of both mortals and deities is shown on a monumental scale in a striking rock relief at Kurangun. Usually dated to the 17th century BCE, the central rectangular panel features a seated divine couple honored by six standing worshippers, two male and one female on either side (for the possible identities of these deities see Potts 2013: 133–135; Henkelman 2008: 376). The worn state of the rock's surface has obscured the details of divine dress, though it is of interest to note that the goddess crouches as if sitting low on her podium, and her robe trails out behind her, falling to the level on which the worshippers are standing. Her pose and garment evoke the earlier Marv Dasht beaker and the Anshanite seals. These trailing robes will remain a characteristic of elite Elamite female dress for the millennium. The male worshippers wear long robes that flare slightly above the ankles, leaving the feet exposed, and wear a head covering with a distinctive forward-pointing peak or visor. This is the first representation of the curious headgear that will be associated with Elamite rulers, particularly in the highlands, for the next thousand years. All that can be determined about the female worshipper's dress is that, in contrast to the men's, it reaches the ground and seems to cover the feet.

Similar garb is worn by male and female figures on a fragmentary relief at Qaleh-ye Tol south of Izeh in the highlands (Hinz 1973, Pl. 17). The figures affect gestures like those of the Kurangun relief, but damage to the upper portions of the stone has obscured the details of hands and headgear. The larger, central female has a long mantle that trails on the ground behind her; the males wear a shorter robe with a flaring hem. The robe with the flaring hem is not limited to the highlands but also appears in seal impressions on tablets excavated at Susa. A variant of the robe is worn by both the worshipper and the deity venerated on the cylinder seal of Tan-uli the *sukkalmah* (great regent at Susa) [Figure 33.2a] which was in use in the early 17th century BCE (Harper et al.1992: 117, No. 76). This flaring hem will remain a feature

of elite Elamite male garments for the rest of the millennium.

Two enigmatic male figures excavated in a religious deposit at Susa, appear at first like the many stereotypical offering figures bearing small animals that are known in both Mesopotamia and Iran in the 2nd millennium BCE (Harper et al.1992: 146, Nos. 89–90). Their complex headgear (or hair arrangement?), beard and bare upper torso with stars set them apart, as does their material – gold and silver [Figure 33.2b]. These figures are of further interest because their long skirts are patterned all over with small dots and the thick fringe of the hem flares outward, rising in the front to reveal the small bare (?) feet. Parallels with the clothing worn by Untash-napirisha both on his stele [Figure 33.3b], and on his fragmentary freestanding sculpture, have suggested a date in the 12th century BCE (Harper et al. 1992: 147–148). However, garments with a dotted pattern and a thick, slightly flaring hem occur on clay figurines of both the Sukkalmah and the later Middle Elamite periods. Pittman (2003: 182–191) has suggested that the statuettes be dated in the later part of the Sukkalmah period (18th–17th centuries BCE), thus placing them close in time to the Kurangun relief.

Later 2nd millennium BCE (Middle Elamite, ca. 1500–1000 BE)

In the second half of the 2nd millennium BCE, divine garments still featured the tiered flounces of previous centuries, but human garments appeared more varied, with an emphasis on fringe and patterned surfaces. Aspects of this can be seen at Kabnak (modern Haft Tepe), a major center southeast of Susa that flourished in the 14th century under the rule of Tepti-ahar “king of Susa and Anshan”. A well-cut stone cylinder seal belonging to Ginadu, an official (*puhu-teppu*) of Inshushinak-shar-ilani, the king of Susa, shows a clearly female worshipper before a seated deity [Figure 33.4a].⁴ Although the worshipper raises her hands like a Lamma (introductory) goddess, she is more stout than that divine being usually is, wears a long smooth garment, not the traditional Mesopotamian-style flounced robes, and lacks the horned crown typical of a divinity. The hem of her garment has a pronounced horizontal band with a wide fringe that flares outward. The back and upper arms of the female worshipper are covered with a mantle that curves in an arc from the back of the neck to the top of the band at the hem. The edge of this mantle has a decorated border of regularly hatched lines that form a ladder-like pattern distinct from the long fringe of the hem. It appears to be an early example of the “ladder band,” a decorative characteristic of later Elamite garments.



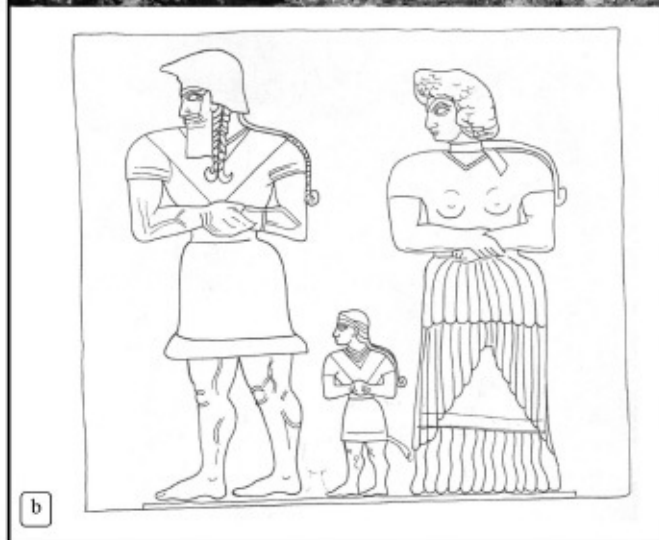
Figure 33.2 [a] Seal impression of sukkalmah Tan-Uli from Susa. Louvre, acc. no. Sb 8748 (© RMN-Grand Palais/Art Resource, NY); [b] Offering figures of gold from Susa. Louvre, acc. no. Sb 2759 (front) and Sb 2758 (back) (© RMN-Grand Palais/Art Resource, NY).



Figure 33.3 Middle Elamite female garbs. [a] Faience (?) figure of standing female from Choga Zanbil. Louvre, acc. no. Sb 5089 (© Musée du Louvre, Dist. RMN-Grand Palais/Art Resource, NY); [b] Central section of the stone stele of Untash Napirisha from Susa. Louvre, acc. no. Sb 12 (© RMN-Grand Palais/Art Resource, NY); [c] Bronze statue of queen Napir Asu from Susa. Louvre, acc. no. Sb 2731 (© RMN-Grand Palais/Art Resource, NY).



a



b

Figure 33.4 [a] Cylinder seal belonging to Ginadu, an official (*puhu-teppu*) (courtesy of Behzad Mofidi-Nasrabadi 2011, Figure 6); [b] Royal family in the Relief of Shekft-e Salman II (photographs by J. Álvarez-Mon; line drawing by drawing by Erik Smekens, Belgian Archaeological Mission in Iran, courtesy of Dr. Bruno Overlaet).

A second seal of Ginadu's, beautifully cut from lapis lazuli and set with gold caps, shows a male worshipper in a long robe before a seated god wearing the traditional tiered or flounced robe. The worshipper's robe has narrow vertical pleats or stripes and a hem that flares outward in front and back, as does that on an heirloom seal of the *sukkalmah* period still in use centuries later at Haft Tepe (Mofidi-Nasrabadi 2011: 67–68, 159–160; Pls. 7 and 56). Other sealings from Haft Tepe (Mofidi-Nasrabadi 2011: 79–80, 195; Pls. 9, 82–83) and Susa (Amiet

1996: 139, Figure 19 and 142) show versions of the same pleated or striped skirt. The account of linen disbursement on a Haft Tepe tablet may refer to the fabric from which such garments could be made (Potts 2016: 192).

A craftsman's workshop at Haft Tepe yielded two female⁵ heads of clay featuring elaborate hair arrangements with entwined bands, evoking the Metropolitan Museum male head. The main band on the Haft Tepe heads passes low across the forehead rather like the hair band of the standing figure on the Marv Dasht beaker, and both heads have rosettes molded in relief. These in turn suggest the headband of the seated figure on the Marv Dasht beaker with its series of rounded forms, perhaps puffs or knots of fabric suggestive of rosettes. The exact significance of the Haft Tepe headbands is unclear, but undoubtedly, they are a marker of membership in an elite Elamite female cohort.

The dress of such an elite female may be seen in the garb of Queen Napirasu, wife of Untash-Napirisha, "king of Anshan and Susa" in the 14th century BCE and probably the daughter of the Kassite king Burnaburriash II [[Figure 33.3c](#)] (Harper et al.1992: 132–134, No. 83; Potts 2016: 212). Her life-size bronze statue excavated at Susa depicts a substantial woman whose columnar dress is notable for its short sleeves and heavily ornamented skirt. The garment, which reaches the ground and seems to have obscured her feet – the bottom edge is damaged – has a variety of patterns. The basic fabric is covered with small dots. The skirt is further embellished with a very wide hem of undulating fringe. A second band of extremely long fringe wraps around the back of the waist and hips but does not cover the front of the skirt. This second band calls to mind the curving waist-encircling fringe on robes of the figures in the much earlier Marv Dasht beaker. A vertical panel on the front of the skirt has a wide central strip with narrow triangular borders and a short fringe on the proper right. A section of the central strip shown horizontally just below Napirasu's hands, and a tapered triangular segment of fringe also on the proper right suggests that this panel is folded over the front of the skirt.

The damaged stone stele of Napirasu's spouse, Untash-Napirisha, carved in a style far different from the sophisticated bronze, provides additional examples of female garb (Harper et al.1992: 128–129, No. 80). Two women shown on the stele, Queen Napirasu and the priestess U-tik, probably Untash-Napirisha's mother, wear long voluminous skirts with a wide tier of fringe at the hips and a second at the hem, like the great bronze. The fabric between the two fringed bands has a faint all-over pattern of small dots or circles. The hems do not sweep the ground but end above the ankles. Napirasu's fringe undulates slightly while U-tik's fringe is straight. Untash-Napirisha's skirt has an all-over pattern of small circles and its hem is fringed, though not as heavily as the skirts of the royal women.

Queen Napirasu's garment was not unique to her, to judge from two small faience statuettes from Choga Zanbil (ancient Dur Untash), a remarkable sanctuary site founded by Untash-Napirisha, and a 3rd figurine from Susa. The most complete example depicts a woman

wearing a robe with a circle-patterned body, fringed hem and vertical front panel with a broad band of fringe [Figure 33.3a]. The similarity to Queen Napirasu's robe is notable, though the small figure lacks the second band of fringe around the waist (Ghirshman 1966: 87; Pl. LXXXII). The vertical front panel with a "ladder pattern" also appears on the fringed garments of two offering figures on a stone cylinder seal also from Choga Zanbil (Porada 1970, No. 115; Pl. XI). A robe with fringe at the waist as well as at the hem is worn by a standing female figure on a cylinder seal from Choga Zanbil (Porada 1970; Nos. 75, 70; Pl. VII). Her male companion wears the pointed headgear first seen at Kurangun.

A different type of female royal garment is illustrated on an engraved chalcedony stone now in the British Museum [Figure 33.5a](Harper et al.1992: 258, Figure 56). According to its inscription, the stone was a gift from king Shilhak-Inshushinak (1150–1120 BCE) to his daughter Bar-uli who is shown receiving it from his hand. The princess's robe has long full sleeves that fall back to her elbows as she raises her hands toward her enthroned father. The hem flares slightly in front and back like the hems of the royal women on the Untash-Napirisha stele, [Figure 33.3b] and there appears to be a decorative vertical band on the front of the skirt like that on Queen Napirasu. Her hair is confined by a band or filet around her head. The long flowing sleeves also appear on a series of clay female figurines of the same period from Susa as well as an incised drawing of a worshipping(?) female (Spycket 1992; M29, 1144–1147, 11153, Pl. 131, and M31, Pl. 135). The garments of these figurines are also characterized by a uniform all-over diamond pattern like the robes worn on the Marv Dasht beaker. Shilhak-Inshushinak himself wears a short-sleeved robe whose fringe flares slightly above his feet. The only monumental representations from his reign are a royal couple in glazed bricks that were once part of a building. This façade was badly damaged and few details of the standing male figure can be seen. Enough remains of the female to determine that her feet peek out in front of her long robe, the hem of which trails behind her (Harper et al. 1992: 11).

In striking contrast to the long robes worn by males at Susa, two monumental panels carved in the cliff of the sacred grotto of Shikaft-e Salman in the Izeh Valley (Elamite Ayapir) show elite males wearing much shorter garments. Dated to the 12th century (Álvarez-Mon 2010: 216; Miroschedji 2003: 33; Overlaet 2011: 113) though carrying the inscription of a much later local official, each panel depicts an elite family, presumably local, piously moving toward or at least facing the dramatic cave whose face is covered by a seasonal waterfall. Panel II, the best preserved [Figure 33.4b] depicts an adult male and an adult female with a male child between them. The female has a long skirt with three tiers of fringe whose thick, rounded strands suggest lappets, individually applied strips or ribbons, rather than bands of fine threads. The second tier of lappets parts in the center of the skirt and tapers to each side. Similar rows of rounded lappets ornament the skirts on a series of female figurines from Susa, some of which overlap to form an inverted V-shape on the front of the skirt (Spycket 1992, Pls

132–133). The male in panel II wears a short kilt or skirt that ends above the knees and has a broad hem that flares outward. The upper torso is covered by a short-sleeved shirt that either has a wide V-neck or had a decorative band that forms a V. The child is dressed like the adult male, though only the adult male wears a helmet-like headgear with a pointed visor. The broad solid forms, the bare arms and folded hands echo both the style and the stance of the figures in the Untash-Napirisha stele expanded to fill a large rock face.

Very similar garb with a longer skirt is worn by a standing male figure carved on a rock face at Naqsh-e Rostam, near Persepolis [[Figure 33.5b](#)]. The relief once included other figures, but a Sasanian relief has obliterated most of them. The original composition has been dated in the 6th–7th century BCE (Álvarez-Mon 2010a: 215–216), but the stylistic parallels with the Shikāft-e Salman reliefs suggest an earlier date for the standing male. His pointed headgear has been connected to that worn by Atta-hamiti-Inshushinak, a Neo-Elamite ruler of the 7th century (Harper et al. 1992: 198, No. 140; Álvarez-Mon 2010a: 216; Miroschedji 1990: 74, n. 27), though a version of this headgear also appears on the Kurangun relief. A closer parallel complete with the downward slant of the visor appears in a Middle Elamite incised drawing from Susa showing a male figure whose headgear, beard and thick flaring hem parallel the rock relief (Spycket 1992: 19, Pl. 135; Amiet 1966: 444, no. 339). Thus, a 12th century BCE date is plausible.

First millennium (Neo-Elamite ca. 1000–539 BCE)

A now-fragmentary stone stele of the ruler Atta-hamiti-inshushinak and his queen provides at least partial documentation of elite human garb in the mid-first millennium BCE. The date of this ruler who calls himself king of Anshan and Susa and “enlarger of the realm” is uncertain, as he does not appear in the known king lists. He has been placed in the mid-seventh century BCE by Harper et al. (1992: 198–199, No. 140). Others (Waters 2000: 85–87; Potts 2016: 316) think he may be “Athamaita” (530–520 BCE), leader of the 3rd Elamite revolt against Darius the Achaemenid and one of the rebels shown on the Bisotun relief.

On his relief, Atta-hamiti-inshushinak wears a short-sleeved shirt with a narrow decorative band at the round neckline and on the edge of the sleeves. This garment in turn is covered by an elaborately decorated shawl-like textile having several strips of décor edged by a short fringe. The shirt and the shawl-like textile are cinched at the narrow waist by a belt decorated with rosettes separated by double vertical lines. The preserved upper portion of the skirt has narrow vertical lines, but whether these represent fringe or pleats is difficult to tell. The rest of the garment is missing; only the rear portion of the hem remains showing the flaring fringe. The king wears the headgear with a pointed visor known since the earlier 2nd millennium, though the visor element is now more pronounced. The headgear is ornamented with a band bearing rosettes, perhaps gold bracteates. While Álvarez-Mon (2010a: 217–218) sees

Babylonian parallels in the dress, other antecedents can also be noted. The rosette-decorated headband echoes the rosette-studded headbands of the clay heads from Haft Tepe, and rosette headbands were worn by apotropaic figures in the reliefs in the Assyrian capital of Dur Sharrukin (modern Khorsabad) occupied in the last quarter of the 8th century BCE (Moortgat 1969: 37, Figure 43), by royal officials in the wall painting at 8th century Til Barsip (Parrot 1961: 105, Figure 114), and by the Assyrian king Assurbanipal (Albenda 2014). The bracelet with adorsed lion heads on Atta-hamiti-inshushinak's right arm has two exact parallels in gold (IM 105702 and 105703) found in the tomb of Banitu/Yaba' and Ataliya (Queens' Tomb II) at Nimrud dated in the late 8th century BCE (Collon 2008: 111–112, Pl. II). The Assyrian – or Assyrianizing – aspects of Atta-hamiti-inshushinak's dress suggest a 7th century date for the relief rather than a late 6th century date. If Atta-hamiti-inshushinak were the Athamaita who rebelled against Darius, it is unlikely that he would portray himself wearing ornaments associated with a past foreign empire rather than more current – and local – fashion. Atta-hamiti-inshushinak's queen was also represented in the relief but too little of her remains to draw any conclusions about her dress.



Figure 33.5 [a] Engraved chalcedony of Shilhak Inshushinak. British Museum 113886. (Copyright Trustees of the British Museum); [b] Fragmentary bitumen relief of seated female from Susa (The Spinner) (Louvre, acc. no. Sb 2834. © RMN-Grand Palais/Art Resource, NY); [c] Elamite rock relief at Naqsh-e Rostam (Photo P. 57368. Courtesy of the Oriental Institute of the University of Chicago).

The only complete representation of a woman excavated at Susa is a fragmentary molded bitumen plaque generally dated in the 8th–7th century [Figure 33.5b]. It shows a woman seated on a short animal-footed stool with her legs crossed under her (Harper et al.1992: 200, No. 141). She supports a ball of wool in her left hand (Bier 1995: 1583) while her right hand turns the drop-spindle that hangs between her hands. The seated woman wears a long, smooth

robe and a mantle that covers her shoulders, upper arms and back rather like the mantle on the worshipper on the seal of Ginadu at Haft Tepe [Figure 33.4a]. The wide border of the mantle features a narrow band of square panels with central circles called a “ladder band” and identified as a distinctly Elamite element (Álvarez-Mon 2009: 28). There is no fringe and the figure does not wear the voluminous fringed or flounced skirt that characterized earlier elite females. Her compact seated posture and the detail of the sole of her bare foot evoke the seated posture and bare toes of the seated figure on the Marv Dasht beaker and to a lesser degree the seated females on the Anshanite seals of the turn of the 3rd millennium. Her hair is arranged in a complex series of folds around the head as well as in front of the ears. One smooth band low on her forehead appears to hold the arrangement in place, much like the bands on the earlier Haft Tepe heads.

Behind the seated woman stands a smooth-faced attendant with short curly hair who uses both hands to support a square fan. In front of the seated woman is a table holding a fish and six round forms, perhaps bread. Visible to the right of the table is a robe or gown with two tiers of round lappets, presumably the dress of a standing figure making an offering. The multiple tiers suggest a standing female rather than male Figure The combination of posture, gesture, dress and material, as well as its archaeological context, render the work an intriguing anomaly.

It has also been argued that the Assyrian queen depicted in the famous “garden” relief of Assurbanipal could be Elamite on the basis of her mural crown, her richly patterned robes and the historical context (Álvarez-Mon 2009a). This queen had been identified as Libbali-sharrat, a powerful woman who had her own stele among the 140 royal stelae at Assur, the old Assyrian capital north of Nineveh (Svård 2015: 65–66, 74–80, 88, 208–212; contra Root 2011: 450–453). The mural crown has no “foreign” connotation in the Assyrian royal tradition and in fact was also worn by Naqi’a, mother of Essarhaddon, and hence grandmother of Assurbanipal (Svård 2015: 79–80). There are few large-scale representations of Assyrian queens, so it is difficult to judge how distinctive is the dress shown in the garden relief.

Another source of information about elite Elamite dress are the extensive relief panels that ornamented the palace of the Assyrian king Assurbanipal (668–627 BCE) in the North Palace at Nineveh. In room Room S¹ the defeat of the Elamites in the battle of Til Tuba shows the doomed ruler Te-Umman (648?–645?) wearing a mantle whose vertical edge bears a band of rosettes and fringe that looks like slightly undulating lappets with rounded ends [Figure 33.6a]. The royal headgear is a rounded head piece of low profile with a long, feather-like element hanging from the back edge. In contrast, the submission of the renegade(?) Elamite Umanaldash (Humban-haltash r. 646–645 BCE) shows him wearing a mantle with a simple fringed edge [Figure 33.6b]. The distinction between the dress of the two Elamites is clear, but its import is now lost to us.

Elamite dress in the highlands is illustrated by a number of figures carved on the cliffs of the

Izeh Valley (Elamite Ayapir). Most detailed is a relief commissioned by a local ruler, Hanni (625–585 BCE) on the rock wall of a cul-de-sac called Kul-e Farah [Figure 33.6c]. There are additional Elamite reliefs on the freestanding boulders of Kul-e Farah; Hanni's relief is numbered I in the series. Hanni's garment features several layers, but the actual construction of the robe or robes is unclear. His arms are bare and the edges of the short sleeves can be seen beneath the band of heavy fringe, lappets or perhaps appliqued ribbons. This band is bordered by, or attached to, a decorative line of small rosettes set in discrete squares. This pattern has been called a "ladder band" and identified as a distinctive Elamite characteristic (Álvarez-Mon 2009: 28). It may have its antecedents in the vertical bands noted above in the later 2nd millennium elite garb, and if so may indeed carry a specific meaning. One might interpret the upper outer garment as a hip-length shawl secured at the waist by a belt. The shift in orientation of the lappets below the belt argues against interpreting the garment as a jacket with the right side overlapping the left. The long skirt has a hem with a patterned border and wide band of lappets. The hem the curves up in the center revealing Hanni's bare feet (Álvarez-Mon 2010a: 211) then dips down and out to either side like the flared hems of the 2nd millennium. Álvarez-Mon (2009: 28) considers Hanni to be wearing "the highland-style, segmented, fringed coat" but this interpretation remains speculative. Hanni's garment echoes general elite Assyrian robes with overwrapped mantles and borders of fine wavy fringe (for other interpretations of the garment see Álvarez-Mon 2010a: 211, n.31). Hanni's garb is also unlike the other representations in the same cul-de-sac where the main figures wear either short flaring skirts (Kul-e Farah II) or long, straight skirts with a simple fringed hem (Kul-e Farah III). The fringed (or lappeted) upper-body garment does appear on the supportive (or Atlantid) figures at Kul-e Farah III and VI. The now-damaged rounded headgear of Hanni does not have the pointed visor noted on other representations including that of Atta-Hamiti-Inshushinak, and has been compared to the headgear worn by the Elamite ruler Humban-haltash in the reliefs of Assurbanipal at Nineveh [Figure 33.6b].

A much smaller figure behind Hanni identified by an inscription as Shutruru, Hanni's *nisikkir* ("cupbearer", actually a lofty position more like a vizier), (Gorris 2014: 261) wears a different garment [Figure 33.6c]. His upper body appears to be clad in a shirt with a V-shaped neckline; the less damaged skirt features three horizontal tiers of lappets or ribbons each anchored to a double horizontal band. This lappet-covered skirt has usually been female garb, though the wearer in this case is surely male. Perhaps the garment has a ritual or religious association claimed in this instance by a man. What is remarkable about the Hanni relief is that two of the principal male figures wear garments quite different from those known elsewhere in Elam.

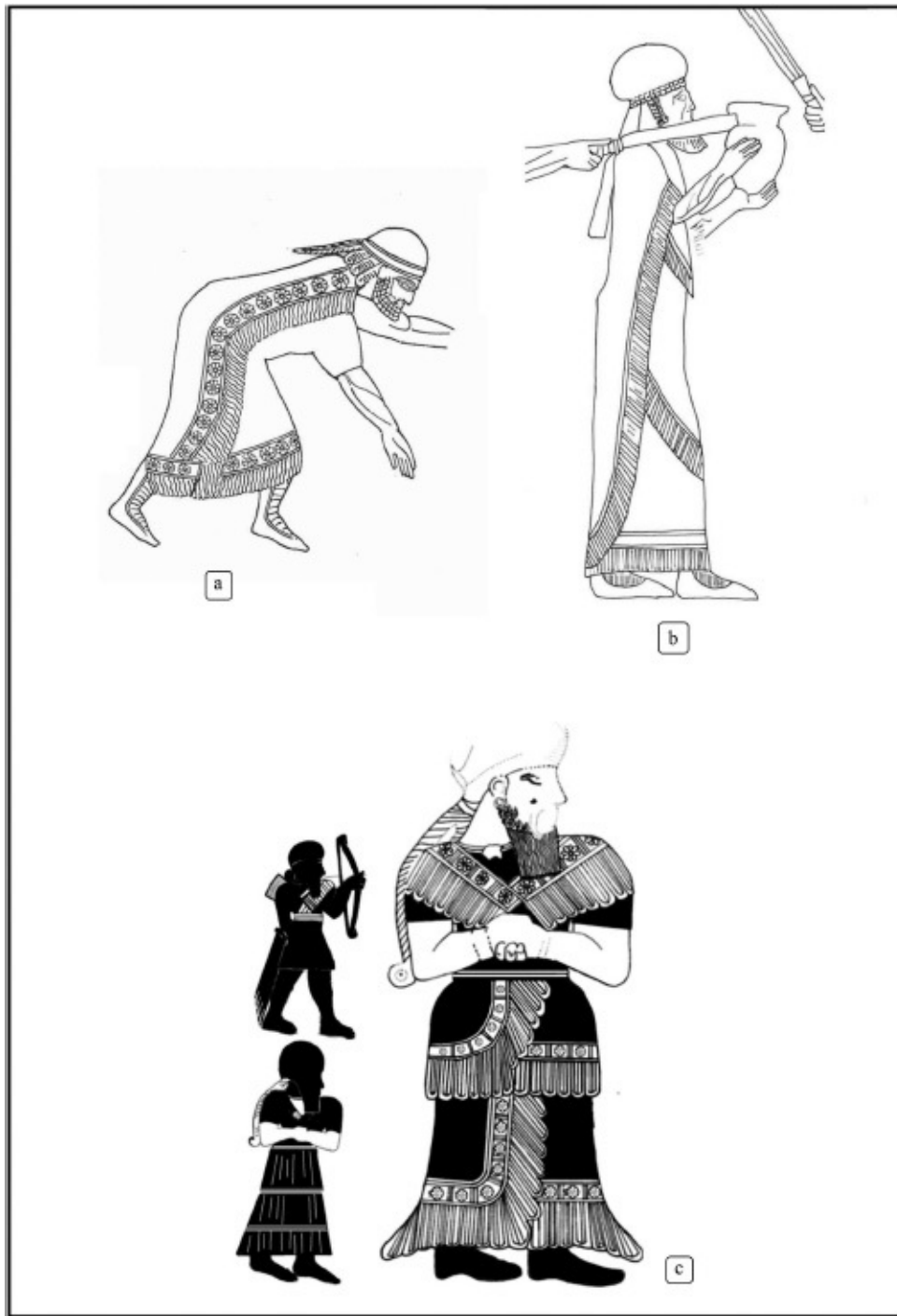


Figure 33.6 [a] Depictions of King Teumman in the battle of the Ûla(-)ya River at Tell Tuba (line-drawing by Sarre and Herzfeld 1910 Figure 78); [b] King Umanaldash/Humban-Haltaš III (line-drawing by J. Álvarez-Mon after Barnett 1976 Pls. 34. 64); [c] Detail of relief of Kul-e Farah I (line-drawing by J. Álvarez-Mon).

The chance find of an elite tomb dated between 600 and 575 BCE at Arjan in the same region has yielded actual remains of an elaborately decorated textile (Álvarez-Mon 2010: 30–42; Pls. 11–12). The Arjan textile is a rectangular piece of cotton woven with a band of what seems to be openwork on one short side that is also embellished with gold foil appliques. This garment has been called “the elite Elamite *fransenmantel* (Álvarez-Mon 2009: 28–30), though

it is not clear that the openwork formed a fringe, nor how it could have been arranged or worn. Its current state suggests that it was folded, not wrapped or worn by the deceased. Its original pale color and the openwork band may have served as a semi-transparent covering for another, perhaps differently colored, garment. This textile is also notable as the first documented example of cotton in Iran. Cotton was domesticated in south India in the 3rd millennium BCE and introduced into southern Mesopotamia early in the first millennium BCE. It has been identified with the Babylonian term *kitinnû*, a rare and expensive textile (Zawadzki 2006: 25–29) and remains of cotton textiles have been found in the late 8th century grave of the queens Yaba and Atalia at Nimrud in northern Mesopotamia (Álvarez-Mon 2010: 207, 234; Toray Industries 1996: 199). Cotton was known as far west as the Aegean by the 6th century BCE (Barber 1991: 32–33), so it is not surprising that cotton textiles were owned by the elite in Elam in the same period. It is not clear, however, whether cotton textiles were exported to Elam and regions farther west, or if the plant was actually grown there. The production of cotton cloth differs markedly from that of linen or wool. It may be that the finished product was exported but not the newer techniques of spinning, dyeing and weaving (Barber 1991: 33).

The Arjan gold foil appliques have been compared to décor of divine Mesopotamian garments discussed by A. Leo Oppenheim, who also saw them as a reflection of deeper cultural paradigms in the use of repeated geometric shapes (Oppenheim 1949: 189). But the effect of golden bracteates twinkling like sequins in the flickering light of oil lamps and torches would destroy any illusion of regularized, limited motifs, evoking instead a glimmering, transcendent surface as immaterial as it was glittering. The discovery of the use of goethite to also produce a golden sheen on textiles at Phrygian Gordion in the 8–7th century BCE (Rose 2016: 19; Rose and Darbyshire 2016: 100) reminds us that other cultures also created golden garments.

Chance finds during road construction near Ram Hormuz, a region where the rolling lowlands about the Zagros Mountains, have provided several depictions of female dress in the Neo-Elamite period. A series of small, seated female figures, each cast in bronze and fastened to the handle of an offering pan, were excavated from two tombs of elite females near the village of Joubji (Wicks 2015: 25–30; Shishegar 2015). Each depicts a richly attired woman whose skirt has horizontal tiers of rippling lines; a fish's body complete with dorsal and caudal fins extends from the rear of the seated figure as if she were a mermaid. All figures are quite similar, though none are identical. The best preserved has five tiers of wide undulating lappets, not fine, single-thread fringe. Each tier of lappets has a distinct narrow band at the top. Little bare toes peep out from under the flaring hem; the soles of the feet are completely modeled even though they could not be seen when the figure was riveted to the handle of the pan. The lappets of these “fish-ladies” recall those of the females in the earlier reliefs at Shikāft-e Salman that faced a dramatic seasonal waterfall. The water-like fall of the lappets/fringe

suggests female stewardship of water, and by extension abundance and of course life itself. The association of women and water has a long tradition in Iran (Overlaet 2011).

It is difficult to tell if the Joubji figures are deities or mortals, though the attached fish's body suggests that they are supra-normal at the very least. One of the women buried with the figurines had a wide necklace of diamond-shaped pendants exactly like that worn by her bronze figurine. This explicit identification of the deceased with the figurine in turn raises the possibility that Elamite women robed in long flowing and lappet-covered or fringed garments may encode in their dress aspects of their religious status or function (Wicks 2015: 98–99). By extension, the heavily fringed/lappet-covered skirts of some Elamite women in the 2nd millennium may also reflect a religious identity that complemented the political role of the men with which they were connected. Though these women do not appear in the written documents known to date, they may have played a vital role in Elamite governance.

A new type of clothing appears in Elamite art in the 7th–6th century BCE, equestrian dress. It consists of a fitted shirt and what appears to be trousers or perhaps closely fitting leggings. It is easily distinguishable from the garb of Assyrian cavalymen wearing a short shirt or kilt or what seem to be lamellar mail shirts and gaiters. Horsemen dressed in this way appear only on cylinder seals where the image is often paired with a clearly Elamite name (Garrison 2011: 377–379, 382, 384). The dress does not appear as far as we can tell in the more formal monuments of rulers, but its presence on the seals is an indication of changing dress, and perhaps population in Elam. It may be too far a reach to discern steppe influence here, but similar riding garb has a long history in the steppes and is not depicted earlier in Iran. It may be that the Central Asian influence noted at the end of the 3rd millennium was repeated at the end of the Late Elamite period.

A final aspect of Elamite textiles to consider is negative – the absence of the checker pattern and related geometric motifs so popular elsewhere the Near East in the first millennium BCE. The pattern can be seen on textile representations from Hasanlu in northwestern Iran (Muscarella 1980: 134–135, No. 254); to garments worn by officials in the 8th century BCE Assyrian wall paintings at Til Barsip, Syria (Parrot 1961: 101), and actual textile fragments from Megaron 3 at Gordion (Rose and Darbyshire 2016: 102). The taste for checkered patterns extended to painted ceramics at Sialk, Necropolis B (Ghirshman 1939: frontispiece, Pls. X, -XI, XIII–XV, LIV, LXIV, LXVII, LXXX–LXXXVIII) and ceiling tiles at Baba Jan (Bier 1995: 1585) in western Iran, and in Phrygian Anatolia to ceramics (Rose and Darbyshire 2016: 104, 106, 110–112, 124–125), inlaid wood furniture in Tumulus MM at Gordion (Rose and Darbyshire 2016: 74), pebble floors in Megaron 2 at Gordion (Rose and Darbyshire 2016: 103) and even tomb facades at Midas City). The absence of the checker pattern in Elamite dress and textiles may be the result of the random nature of archaeological discovery, but in view of its popularity elsewhere, its absence in Elam is notable.

Achaemenid Period (539–330 BCE)

While the rise of Cyrus the Great in the middle of the sixth century BCE may have changed the political landscape of Elam, it did not necessarily change dress. The ethnicity of Cyrus himself is unclear, and his name has been considered Elamite (Waters 2011). If we believe the *Nabonidus Chronicle*, Cyrus' son Cambyses wore an "Elamite" garment at his investiture as ruler of Babylon. Whether this simply meant a non-Babylonian garment, or a garment identified with Elam in general or its mountainous highlands is unclear. This garment has been identified with the so-called Elamite *fransenmantel* (Álvarez-Mon 2009: 26). With no clear description of Cambyses' garment, the identification remains hypothetical.

It is not until the building programs undertaken by Darius the Achaemenid (r. 522–486 BCE), that we can see clearly what clothing the elites are wearing. The long-sleeved finely textured robes with their narrow pleats from both Persepolis and Susa, in stone, glazed brick and on seals, became identifiable "Persian" dress throughout the Achaemenid Empire (Dusinberre 2003: 87–88, 145–149; McFerrin 2017). Nothing of the Elamite traditions of elite garb can be seen, no fringes or lappets, no wrapped shawls nor flaring hems, no headgear with pointed visors. Only the guardian figure on Gate R at Pasargadae, a unique image in Achaemenid art, refers to Elamite traditions of dress with the robe whose vertical edge is ornamented with a border of rosettes and fine fringe (Álvarez-Mon 2010a: 221–225). This may be the final depiction of the *fransenmantel*.

Conclusion

Distinctly Elamite garments are difficult to identify in the 3rd millennium BCE when Mesopotamian fashions, along with Mesopotamian political and military power, were paramount. The dress of both deities and rulers followed Mesopotamian forms. Additional influence from the BMAC of Central Asia at the end of the 3rd millennium can be seen in the voluminous female garments on the Marv Dasht beaker and in subsequent Anshanite glyptic art. In the first half of the 2nd millennium, Elamite male garb was a long smooth robe with a flaring hem that did not cover the feet and distinct headgear featuring a pronounced pointed visor. This was to be the basic elite dress for the next thousand years. Some male figures, not clearly mortal or divine, wore patterned and fringed robes. Female garb featured long full garments whose skirts often trailed behind them. Divine garments usually followed the Mesopotamian model. In the second half of the millennium the robes of elite women bore multiple tiers of fringe or lappets that echoed divine dress, blurring somewhat the distinction between the two. Male garments whether short or long had a pronounced flare at the hem. By the earlier first millennium, the distinction between elite male and female dress changed with heavily fringed or flounced shirts worn on occasion by both and elite men wearing a shawl-

like garment with a broad band of fringe forming a V-shape neckline. The Assyrian images depictions of Elamite rulers do not depict these shawls but do show differing headgear and garments of captured Elamite rulers. The striking changes in Elamite garb in the first millennium BCE suggest changes in Elamite religious, social and political structures that are as yet unclear to us.

Notes

- [1](#) I am indebted to Javier Álvarez-Mon for inviting me to explore this fascinating topic, and to Yasmina Wicks for her generous insights. I have also benefitted from the helpful advice and comments of Carol Bier, Wouter Henkelman, Ali-Reza Khounani, Judith Lerner, Dan Potts and Matthew Waters. Any errors, of course, are all my own.
- [2](#) The application of a classical Greek word to an Elamite garment is not appropriate, and this term will not be used here.
- [3](#) For a second millennium BCE royal request specifying removable ruffles on a garment, see Bier 1995: 1581.
- [4](#) For the archaeological context of the seal, the significance of the title and the uncertainty of the owner's gender, see Mofidi-Nasrabadi 2011a.
- [5](#) One head has been called male (Negahban 1991: 37; Álvarez-Mon 2005: 116), but the complicated hair arrangement and the choker necklace are female characteristics.

Bibliography

- Albenda, P. 2014. Thoughts on some images of King Ashurbanipal. *Nouvelles Assyriologiques Brèves et Utilitaires* 2014–2098.
- Álvarez-Mon, J. 2005. Elamite Funerary Clay Heads. *Near Eastern Archaeology* 68: 114–122.
- . 2009a. Notes on the 'Elamite' Garment of Cyrus the Great. *Antiquaries Journal* 89: 21–33.
- . 2009b. Ashurbanipal's Feast: A View from Elam. *Iranica Antiqua* XLIV/44: 131–180.
- . 2010. *The Arjan Tomb. At the Crossroads of the Elamite and the Persian Empires*. Acta Iranica 49. Leiden: Peeters.
- . 2010a. Elite Garments and Head-Dresses of the Late Neo-Elamite Period (7th–6th Century BC). *Archäologische Mitteilungen aus Iran und Turan* 42: 207–235.
- Amiet, P. 1966. *Elam*. Paris: Archée Éditeur.
- . 1972. *Glyptique susienne. Cachets, sceaux-cylindres et empreintes antiques*. 2 Vols. Mémoires de la Délégation Archéologique en Iran XLIII. Paris: Geuthner.
- . 1992. Tiares elamites. *Studi Micenei ed Egeo-Anatolici* XXX: 257–265.
- . 1996. Observations sur les sceaux de Haft Tépé Kabnak. *Revue d'Assyriologie et d'archéologie orientale* 90: 135–143.
- Barber, E.J.W. 1991. *Prehistoric Textiles*. Princeton: Princeton University Press.
- Barnett, R.D. 1976. *Sculptures from the North Palace of Ashurbanipal (668–627 B.C.)*. London.
- Bier, C. 1995. Textile Arts in Ancient Western Asia. In: J. Sasson (ed.) *Civilizations of the Ancient Near East*, vol. III. New York: Scribners' Sons, 1567–1588.

- Braun-Holzinger, E.A. 2007. *Das Herrscherbild in Mesopotamien und Elam*. Alter Orient und Altes Testament, vol. 342. Münster: Ugarit-Verlag.
- Collon, D. (ed.) 2008. Nimrud Treasures: Panel Discussion. In: Curtis, J., McCall, H., Collon, D. and al-Gailani, L. Werr (eds.) *New Light on Nimrud: Proceedings of the Nimrud Conference 11th-13th of March 2002*. British Institute for the Study of Iraq in Association with the British Museum, London: 105–118.
- Dusinberre, E.R.M. 2003. *Aspects of Empire in Achaemenid Sardis*. Cambridge: Cambridge University Press.
- Garrison, M.B. 2011. The Seal of 'Kuras the Anzanite, Son of Sheshpesh' (Teispes), PFS 93* In: Alvarez-Mon, J. and Garrison, M. (eds.) *Elam and Persia*. Winona Lake: Eisenbrauns, 375–405.
- Ghirshman, R. 1939. *Fouilles de Sialk, près de Kashan*. Vol. II. Paris: Musée du Louvre.
- . 1966. *Tchoga Zanbil I. La ziggurat*. Mémoires de la délégation archéologique en Iran XXXIX. Paris.
- Good, I. 1998. Bronze Age Cloth and Clothing of the Tarim Basin: The Chärchän Evidence. In: Mair, V.H. (ed.) *The Bronze Age and Early Iron Age Peoples of Eastern and Central Asia*. Journal of Indo-European Studies Monograph Series 26. 2 vols. Washington D.C., 656–668.
- Gorris, E. 2014. *Power and Politics in the Neo-Elamite Kingdom*. PhD Diss., Université catholique de Louvain.
- Hansen, D. 1970. A Proto-Elamite Silver Figurine in The Metropolitan Museum of Art, *Metropolitan Museum Journal* 3: 5–26.
- Harper, P.O., Aruz, J. and Tallon, F. (eds.) 1992. *The Royal City of Susa. Ancient Near Eastern Treasures in the Louvre*. New York: Metropolitan Museum of Art.
- Henkelman, W.F.M. 2008. *The Other Gods Who Are. Studies in Elamite Iranian Acculturation*. Achaemenid History 14. Leiden.
- Hinz, W. 1973. *The Lost World of Elam*. New York: New York University Press.
- Kawami, T.S. 1992a. Archaeological Evidence for Textiles in Pre-Islamic Iran. *Iranian Studies* 25 (1–2): 7–18.
- Miroschedji, P. de. 1990. La fin de l'Elam: essai d'analyse et d'interprétation. *Iranica Antiqua* 25: 47–95.
- . 2003. Susa and the Highlands. In: Miller, N.F. and Abdi, K. (eds.) *Yeki Bud Yeki Nabud. Essays on the Archaeology of Iran in Honor of William M Sumner*. Los Angeles: The Cotsen Institute of Archaeology, University of California, 17–38.
- McFerrin, N. 2017. Fabrics of Inclusion: Deep Wearing and the Potentials of Materiality on the Apadana Reliefs. In: Cifarelli, M. and Gawlinski, L. (eds.) *What Shall I Say of Clothes? Theoretical and Methodological Approaches to the Study of Dress in Antiquity*. Selected Papers on Ancient Art and Architecture 3. Boston: Archaeological Institute of America, 143–159.
- Mofidi-Nasrabadi, B. 2011. *Die Glyptik aus Haft Tappeh*. Elamica 1. Hildesheim: Verlag Franzbecker.
- . 2011a. The Grave of a *puhu-teppu* from Haft Tappeh. *Akkadica* 132, fsc. 2: 151–161.
- Moortgat, A. 1969. *The Art of Ancient Mesopotamia*. London and New York.
- Muscarella, O.W. 1980. *The Catalogue of Ivories from Hasanlu, Iran*. University Museum Monograph 40. Philadelphia: The University of Pennsylvania Museum.
- . 1988. *Bronze and Iron. Ancient Near Eastern Artifacts in the Metropolitan Museum of Art*. New York.
- Negahban, E.O. 1991. *Excavations at Haft Tepe, Iran*. Philadelphia: The University of Pennsylvania Museum.
- Neumann, K. 2017. Gods Among Men: Fashioning the Divine Image in Assyria. In: Cifarelli, M. and Gawlinski, L. (eds.) *What*

- Shall I Say of Clothes? Theoretical and Methodological Approaches to the Study of Dress in Antiquity*. Selected Papers on Ancient Art and Architecture 3. Boston: Archaeological Institute of America, 3–24.
- Oppenheim, A.L. 1949. The Golden Garments of the Gods. *Journal of Near Eastern Studies* 9: 172–213.
- Overlaet, B. 2011. Chale Gar (Kas'an Area) and Votives, *favissae* and Cave Deposits in Pre-Islamic and Islamic Traditions. *Archeologische Mitteilungen aus Iran* 43: 113–140.
- Parrot, A. 1961. *The Art of Assyria*. New York: Golden Press.
- Pittman, H. 2002. The 'Jeweler's' Seal from Susa and Art of Awan. In: E. Ehrenberg (ed.) *Leaving No Stones Unturned. Essays on the Ancient Near East and Egypt in Honor of Donald P. Hansen*. Winona Lake: Eisenbrauns, 211–235.
- . 2003. Reconsidering the 'Trouvaille de la Statuette d'Or'. In: Miller, Naomi F. and Abdi, Kamyar (eds.) *Yeki Bud Yeki Nabud. Essays on the Archaeology of Iran in Honor of William M. Sumner*. Los Angeles: The Cotsen Institute of Archaeology, University of California, 177–191.
- Porada, E. 1970. *Tchoga Zanbil IV. La Glyptique*. Mémoires de la délégation archéologique en Iran XLII. Paris.
- Potts, D.T. 2008. Puzur-Inšušinak and the Oxus Civilization (BMAC): Reflections on Šimaški and the Geo-Political Landscape of Iran and Central Asia in the Ur III period. *Zeitschrift für Assyriologie* 98: 165–194.
- . 2012. The Elamites. *The Oxford Handbook of Iranian History*. Oxford: Oxford University Press, 37–56.
- . 2013. In the shadow of Kurangun: Cultural Developments in the Highlands Between Khuzestan and Anshan. In: Tavernier, J. and De Graef, K., (eds.) *Susa and Elam: Archaeological, Philological, Historical and Geographical Perspectives*. Leiden and Boston: Brill, 129–138.
- . 2016. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*. 2nd edition. Cambridge World Archaeology. New York: Cambridge University Press.
- Root, M.C. 2011. Elam in the Imperial Imagination: From Nineveh to Persepolis. In: Alvarez-Mon, J. and Garrison, M. (eds.) *Elam and Persia*. Winona Lake: Eisenbrauns, 419–474.
- Rose, C.B. 2016. The Golden Age of King Midas. Philadelphia: The University of Pennsylvania Museum.
- Rose, C.B. and Darbyshire, G. (eds.) 2016. *The Golden Age of Midas. Kral Midas'in Altin Cagi*. Exhibition Catalog. Philadelphia: The University of Pennsylvania Museum.
- Sarre, F. and Herzfeld, E. 1910. *Iranische Felsreliefs*. Berlin.
- Sarianidi, V. 2002. *Margush: Ancient Oriental Kingdom in the Old Delta of the Murgab River*. Ashgabat, Turkmenistan.
- Shishegar, A. 2015. *Tomb of the Two Elamite Princesses of the House of King Shutur-Nahunte Son of Indada* [in Persian with an English summary]. Tehran: Cultural Heritage, Handcrafts and Tourism Organization.
- Spycket, A. 1992. *Les figurines de Suse. Vol. 1 Les figurines humaines*. Mémoires de la Délégation Archéologique en Iran LII. Paris: Gabalda.
- Svärd, S. 2015. *Women and Power in Neo-Assyrian Palaces*. State Archives of Assyria Studies XXIII. Helsinki: Neo-Assyrian Text Corpus Project.
- Szarzyn'ska, K. 2002. *Sheep Husbandry and Production of Wool, Garments and Cloths in Archaic Sumer*. Warsaw: Agade.
- Toray Industries Inc. 1996. Report on the Analyses of Textiles Uncovered at the Nimrud Tomb-Chamber. *Al-Rafidan* 17: 199–206.
- Waters, M. 2000. *A Survey of Neo-Elamite History*. State Archives of Assyria Studies XII. Helsinki: University of Helsinki.

- . 2011. Parsumash, Anshan and Cyrus. In: Alvarez-Mon, J. and Garrison, M. (eds.) *Elam and Persia*. Winona Lake: Eisenbrauns, 285–296.
- Wicks, Y. 2015. *Bronze ‘Bathtub’ Coffins in the Context of 8th-6th Century Babylonian, Assyrian and Elamite Funerary Practices*. Oxford: Archaeopress.
- Zawadzki, S. 2006. *Garments of the Gods. Studies on the Textile Industry and Pantheon of Sippar according to the Texts from the Ebabbar Archive*. Orbis Biblicus et Orientalis 218. Fribourg and Göttingen.

Part VII

Elamite society



CHAPTER THIRTY-FOUR

Cuneiform culture and science, calendars, and metrology in Elam

Gian Pietro Basello and Enrico Ascalone¹

The word “culture” is commonly used as either a synonym for “civilization” or in reference to the “shared education” of a specific segment of society, the literate people. In an inspiring book like *The Oxford Handbook of Cuneiform Culture* (Radner and Robson 2011), it is used in both senses, while the syntagm “cuneiform culture” represents an umbrella term for Sumerian, Assyrian, Babylonian, and so on textual communities (Radner and Robson 2011: xxvii, following Stock 1990: 23 in defining textual communities as “microsocieties organized around the common understanding of a script”). While it would be interesting to discuss the extent to which individuals from different social classes and time periods would have identified and labeled themselves as “Elamite” in Susa and other Elamite areas, in what follows we will be concerned with the second meaning, that is, the one pointing to cuneiform literacy in Elam and especially to literacy in the Elamite language.

There are, obviously, many more meanings for the word “culture”. The *Concise Oxford English Dictionary* (11th edition in digital format) in the first place preferred the idea of “culture” as “arts and other manifestations of human intellectual achievement”. Embedded in the word “culture” is the notion of both something requiring a great and continuative effort, just like a sport practised at competitive levels, and of something that is highly regarded. Again, it would be fascinating to know what was esteemed as “cultural” in an ancient society, because “culture” is a cultural concept, mediated by society and changed through time and, inevitably, culture (here in the sense of civilization). The “intellectual” challenges that the Sumerian king Shulgi claimed to have mastered (scribal skills, mathematical understanding, speaking different languages, interpretation of entrails, and playing musical instruments) may be an example of what was considered as culture in his time (Frahm 2011: 511). This kind of terminological reflection would be useful also for other modern balkanizing categories like “literature”, “art”, “religion”, “magic”, and “science” (also Radner and Robson 2011: xxvii), but the difficulties of such a reflection become apparent when one considers that we do not even know the Akkadian words, not to speak of the Elamite ones, used to refer to these categories

which, anyway, respond to a common human need for schematization and classification.

Elamite cuneiform culture

Several languages were written and spoken in ancient Elam; we know of at least Sumerian, Akkadian, Elamite, and, later, Old Persian. But can we speak of an Elamite cuneiform culture encompassing these different languages, that is, of a shared education of the literate segment of Elamite society? In the opposite scenario, as also happens, languages can create walls between their different speakers.

In the *Handbook of Cuneiform Culture*, the term “Elam” and the adjective “Elamite” occur a few times, mainly in passages related to the Elamite campaigns of the Neo-Assyrian kings, while the sites of Susa and Haft Tappeh are mentioned several times, even if their textual evidence has not always been properly published. This shows that there was actually a cuneiform culture in Susiana, but because most of this textual evidence is in Akkadian, there is some unease today in labelling it “Elamite”.

The cuneiform culture of Susiana could be symbolically represented by a “clay plaque” (ca. 10 cm in diameter) found at Haft Tappeh and decorated with a composite being interpreted as an Elamite deity (Negahban 1994: 36 and 41, Figure 14). Drawing on clay did not represent an art in itself: being found close to the “artist’s workshop”, the “clay plaque” was perhaps a draft for some art piece (note that the size is similar to the Haft Tappeh bronze plaque, measuring 10 × 7.5 cm according to Negahban 1990: 138). However, it seems to be rather the doodle of a scribe on a reused lump of clay (“tablets and clay for tablet making” were found in the same trench according to Negahban 1994: 32); in this case it would be an interesting byproduct of the cuneiform culture, comparable to other nice examples from Mesopotamia (Taylor 2011: 19).

Looking at the evidence from Mesopotamia, proofs of an Elamite cuneiform culture are the colophon of the Middle Babylonian tablet UM 29–15–393:106 from Nippur published in Rutz 2006 (*GABA.[R]I gišLI.U₅MUŠ.ŠĒŠ^{ki}* “C[op]y of a writing board from Susa”), the expert in *Enuma Anu Enlil* and extispicy coming all the way from Elam in the Neo-Assyrian tablet SAA 10 160:rev.1–3 (Fincke 2003–2004: 118; on *Enuma Anu Enlil* in Susa, see Scheil 1917b and Rochberg-Halton 1988: 271), the fragment of Syllabary A apparently written using palaeographically Elamite signs (Hallock 1949, Text A, which was not a “trophy of the Elamite wars of Ashurbanipal” but likely a product of scholarly exchange), and the colophon of the Seleucid copy AO 6451:46–50 of an Akkadian ritual text (transliterated in Linssen 2004: 175–176; see also Zadok 2011: 123, n. 3) which Nabopolassar, “king of the Sealand”, carried off from Uruk (on further Sealand connections with Elam, see George 2013: 139–141, to be fully exploited in future scholarship).

As is well known, the large majority of Elamite texts are royal inscriptions and administrative documents. These are broad categories in which different typologies of text, requiring different textual skills, are encompassed. For example, among royal inscriptions, labels and ownership inscriptions were made following pre-established models, while longer texts like the Bisotun inscription are literary in language and composition. However, it is difficult to find strictly literary compositions in the extant Elamite documentation.

Besides royal inscriptions and administrative tablets, there are a limited number of other textual typologies, each represented by very few documents. A few centuries before and after 2000 BCE, we have a treaty (EKI 2, the treaty of Naram-Sin; see also Hinz 1967), a tablet considered Elamite by Scheil found at Tello/Girsu (AO 4325 = Hinz and Koch 1987, Inc. 70 J, published only in cuneiform copy in Cros 1910: 212), and a growing corpus of pseudo-Elamite incantations (e.g. Van Dijk et al. 1985, no. 4:1–2, no. 5:15–22, and no. 18; provisional list in Cunningham 1997: 156–159; M. Krebernik is preparing an updated catalogue).

For the rest of the 2nd millennium, on the front of thousands of inscribed bricks, plus some more articulated royal inscriptions on other text carriers like statues, stelae, or bronze artefacts (see Malbran-Labat, Chapter 23 in this volume), we have only a few dedicatory inscriptions (a glazed terracotta knob [TZ 57], and a mace head [TZ 58/160]), and ownership labels (several mace heads [TZ 58], some bronze items [TZ 59], and many wall knobs [TZ 60]) from Chogha Zanbil, the dedicatory inscription on the agate of Kutir-Nahunte (Lambert 1970), and the bead that Shilhak-Inshushinak gave to his daughter Par-Uli (British Museum ME 113886, published in Sollberger 1965; see also Tavernier 2016: 281–282). All this evidence is, again, strictly related to the king. Three clay beads or “olives” (TZ 61) found among the incinerated remains of tomb II in the Palais-hypogée at Chogha Zanbil are probably labels pertaining to the buried individuals, surely members of the royal family or the elite.

The 1st millennium is slightly richer in textual typologies: we know of eight legal tablets (MDP 11 301–307 and Scheil 1928: 40–42, no. 3, “Bon plaisir royal”) and a fragmentary list of people from Susa (MDP 11 299), a royal grant found at Persepolis (the Persepolis bronze plaque; see Basello 2013 with further references), a difficult text on a vase fragment (Scheil 1927: 43, “Vers l’écriture nucléiforme”); ca. 30 less-understood tablets are letters of non-administrative character (Nin 1–25; Louvre Sb 13080 and Sb 13081 [Lambert 1977]; MDP 36 3; British Museum BM 62783 [Walker 1980: 80, Figure 4], probably also Arg. 1–3), while many administrative texts are in the form of letter orders (including perhaps the letter written on a vase fragment found at Tappeh Hosseyniyeh in the Ramhormoz plain and published in Rezayi-Sadr 2015). All these texts are indeed proof of the existence of a cuneiform culture, because they could not exist without schools and scribes, and the mere existence of scribes, writing in a mutually intelligible way and using a shared repertory of formulae, presupposes the existence of a literate social group. Notwithstanding this, it seems that this group did not express itself in those ways which are usual for literate people, that is, writing stories (often called myths but

not far from contemporary fiction when it becomes so influential as to be a “cult”), treatises, and producing samples of their studies, that is, exercises and speculations. The only exceptions are, perhaps, two Old Elamite non-administrative tablets, a hemerology and an omen text dated to the Neo-Elamite period, all from Susa.

Two old Elamite tablets (Louvre Sb 11249 and Sb 11250)

Two stray tablets from Susa, dated to the last quarter of the 3rd millennium according to their palaeography, were published by Lambert (1974, with cuneiform copy).

One of them (Louvre Sb 11249) has especially received scholarly attention (text and translation of the six first lines in Grillo-Susini 1987: 49; text, translation, and commentary in Tavernier 2011: 338–340). It represents a piece of poetry according to Hinz and Koch (1987: 473, s.v. ki-ki-in) and for others, including Tavernier (2011: 338), a school tablet; recently M. Krebernik has suggested that it is an incantation text. The language is Elamite, but the writing is Old Akkadian, defined as “magnifique” by Lambert (1974: 3). This assessment is not peculiar to the tablet in question: similar aesthetic appreciations have been expressed for the Old Akkadian writing in general (Gelb 1961: 13, quoted also in Hasselbach 2005: 27). R. Hasselbach explained the reasons for this aesthetic perception: the writing “is regular in form, pays much attention to detail, and is remarkably uniform throughout the Sargonic empire”; this uniformity reflects “the general efforts of the Sargonic dynasty to centralize the political and economic system” (Hasselbach 2005: 27). As an example, one can look at the sign *in* on Sb 11249 (photo of the obverse published in Basello 2012b: 71, Figure 3.22), made by three rows (or better, columns, as the tablet was probably kept 90 degrees clockwise at that time) of 13 angular wedges each. In sum, three times 13 equals 39, plus four more strokes for the rest of the sign: so the wrist of the scribe moved swiftly up and down 43 times to impress this sign. There was probably an ideal balance between written and blank spaces on the surface of the tablet, and the scribe could repeat *ad libitum* wedges that were already repeated. This repetition did not have a distinctive function but probably responded to an aesthetic aim. It is attested in some other signs on the tablet and also on Old Akkadian administrative tablets from Eshnunna. Compare, for example, the exemplars of *in* in MAD 1 275:3 and 6 (Oriental Institute Museum A 7772; see also CDLI, <http://cdli.ucla.edu/search/archival_view.php?ObjectID=P215104>, with photo) from the antiquarian market (Gelb 1952: xi): the number of the angular wedges in each row is ca. 12, more or less like in the Elamite tablet. This and other similarities in palaeographical details suggest that there was a scribal continuity between Susa and Eshnunna in the Old Akkadian period. Moreover, administrative tablets in Old Akkadian were also found in Susa (Legrain 1913) and show the same kind of writing. In these tablets, several names with a repeated syllable and therefore probably Elamite are attested (Desset 2012: 56). In any case, the connection with Eshnunna seems to be relevant, since an individual

apparently bearing an Elamite personal name (*ku-ru-za*), son of another individual with an Elamite name (*še-il₈-ha*) (Zadok 1994: 39), is attested in an Old Akkadian rectangular school tablet from the Oriental Institute excavations (TA 1931, 9 = MAD 1 85), suggesting that he was a young Elamite scribe who was learning cuneiform there. *Kuruza* may be compared to ^{MUNUS}*ku-ri-za-am* in MDP 4 4:40 (with cuneiform copy) = MDP 22 73:30 (Zadok 1984: 24, no. 118, s.v. KURI); by chance, this tablet is an act of sale regarding an orchard sold by an individual named *si/š_i-il-ha* (line 2) and the woman Kurizam is a witness (the last one in the list).

The other tablet (Louvre Sb 11250) is palaeographically dated by Lambert to the Ur III period, that is, about a century later than Sb 11249. Several verbal forms in the 1st person singular occur in the text, suggesting again a school text, even if M. Krebernik's suggestion that it could be an incantation seems quite attractive.

The Elamite hemerology

A simple hemerological tablet was found at Susa (Scheil 1925: 157–158, “XIV. Hémérologie élamite”; no museum number is given). The text, with small differences with respect to Scheil, is included also in Livingstone 2013: 83–98, “e”. Each line corresponds to one of the 12 months and for each month a list of favourable days is given (Tavernier 2010: 214–215). The left part of the tablet is broken so that we do not know if the month-names were written logographically according to Mesopotamian tradition or in some other way. The sign *MAŠ* “half” occurs two times (lines 7 and 10) to mark a day as favourable only at midday (Livingstone 2013: 83). A partially damaged colophon is added at the end of the text confirming that it is in the Elamite language. Thanks to the comparative tables with the “Lists of Lucky Days” in Livingstone 2013: 83–98, one can easily ascertain that there are no extant Mesopotamian comparisons for the choice of favourable days which, therefore, seems to be peculiar to Susa. The hemerology is dated on palaeographic grounds to the late Neo-Elamite period.

The Elamite omen tablet (Louvre A 12801)

An omen tablet (Louvre A 12801) was found at Susa during Mecquenem's excavations and later published by Scheil in a paper entitled “Déchiffrement d'un document anzanite relatif aux présages” (Scheil 1917a). Even if Scheil wrote about an “Anzanite” document, it is written in the language we now call Elamite (see Basello 2004: 2–11 and Lindner 2015). The tablet measures ca. 16 × 10 cm and shows a perfect plano-convex shape (the reverse is convex); the lower 3rd of the obverse is unfortunately lost, while the reverse is nearly completely effaced.

The quality of the cuneiform writing is remarkable: at first glance it is difficult to read because the signs are very close to one another, but after some eye training it becomes easier because the wedges were clearly impressed with a sharp vertex, without hesitation by the hand of the scribe. Miniature writing in itself is a clue of the learned character of the tablet. From a palaeographic point of view, the signs are Neo-Elamite and some of them present original developments.

Scheil's transliteration, except for some minor oversights (as observed in a collation of the tablet by the author in 2013), is still excellent, even if his remarks and the translation need to be updated. The content seems to be a composite text of omīna. It is divided into five extant sections through horizontal lines. Sections 2–3 on the obverse ("Face §2" and "Face §3" in Scheil 1917a), for a total of 14 lines (unfortunately the section 3 is mostly damaged), have an Akkadian counterpart in the Mesopotamian omen series *Iqqur īpuš A* §§71–72 (Labat 1965a) and are probably a translation from the Akkadian (Tavernier 2010: 213–214). The correspondence was already recognized by Scheil who referred to the Nineveh tablets K. 2278 and K. 7944 as in Virolleaud 1903, Sin, no. XXXII-XXXVII (Scheil 1917a: 30 and also 43; probably to be corrected in K. 2878:22–46 published in cuneiform copy in Virolleaud 1908, Sin, no. XXIV; cf. also the sources for §§71–72 in Labat 1965a: 47 and the tablet index in Reiner 1998), quoting their text in his extensive commentary. This non-coterminous Elamite-Akkadian bilingual text has still to be fully exploited for the understanding of Elamite grammar and lexicon. Other sections may be genuinely Elamite, as can be shown by two phonological writings of possibly Elamite month-names on the reverse (§2:10: *ITI* ^{AN}*ši-mut-na* *GAM ITI šu-ni²-na*; in Scheil's transliteration, the question mark after *šu* can be removed), while elsewhere the Babylonian standard (abbreviated) logograms for the months are used. The scribe, whose Elamite name, Atekitin, is written in the colophon on the left edge, created something new, combining scraps from different sources and translating at least some of them from Akkadian.

The omen tablet is considered "the only literary text in Elamite" (Reiner 1969: 63) "so far identified" (Walker 1980: 76), but I would instead prefer to qualify it as "learned", or even "technical" text (considering the professional use of omīna). These same labels could also be applied to the two Old Elamite non-administrative tablets and the Neo-Elamite hemerology.

A "literary commentary or an omen text" in two columns has been tentatively identified by C. Walker on an Elamite tablet fragment now in the British Museum (BM 136847), coming possibly from Susa (Walker 1980: 76, photos on Pls. Ib and IIb, and copy on p. 7, Figure 3). On palaeographical grounds, Walker dated it to the Middle Elamite period. The name of Shilhak-Inshushinak occurs two times on the obverse.

School and learned texts in Akkadian language from Elam

Presently, this is the sum of our scant evidence for a learned production in the Elamite language. We face the usual dilemma of the epigraphist or archaeologist who has found a unique piece: does it represent the tip of an iceberg or a remarkable exception? There is some additional evidence which, coming from Susa and Susiana, can be regarded as Elamite in a cultural sense. Yet because it is written in the Sumerian and especially the Akkadian language, and the Elamite/Akkadian language duality is presumed to have corresponded to an ethnic duality, it has often been treated separately.

The following are just a few examples (cf. a similar list in Malbran-Labat 1995: 218, n. 4, and the detailed treatments in Lackenbacher 1998 and Tavernier 2010: 210–212):

- the prism fragments of the so-called *Sumerian king list* found at Susa, pertaining to at least two different exemplars (Scheil 1934: 159). The employment of a prism as text carrier speaks for the cultural value of this document. It is not a simple copy, since some passages were intentionally omitted. For example, this one mentioning (in the other recensions) the defeat of Elam by Enmeparagesi (lines 83–86): en-me-para₁₀-ge-si | lú ma-da elam^{ki}-ma | ^{geš}tukul-bé íb-ta-an-ḥaš!(GAM)<-a> | lugal-àm “Enmeparagêsi, the one <who> broke the weapons of the land of Elam, became king” (Marchesi 2010: 239, historical note no. 2; see also n. 46). Clearly this omission reflects a certain parochialism: the defeat brought shame upon the people of Susa. Moreover, the text suggests that Susa was already part of, or connected with, Elam at that time;
- a group of exercise tablets from Susa Ville Royale Chantier B dated to the beginning of the *Sukkalmah* period (ca. 1800 BCE) and published by Tanret and De Graef (2010; first published in Tanret 1986). As an example, one can mention a multiplication tablet of 30 on a lentil (TS.B.115 = National Museum of Iran BK 396; Tanret and De Graef 2010: 244, no. 24, photo on p. 255, Pl. 5) from Chantier B V ancien (“to be dated at the beginning of the *Sukkalmah* period, ca. 1850 to 1775 BCE” according to Tanret and De Graef 2010: 230) and measuring 8.5 cm in diameter (Tanret 1986: 147; Tanret and De Graef 2010: 227, table). According to the description by Tanret and De Graef, it is a “complete lentil, lineated” with “[a] number of multipliers ... left out (11, 13, 14, 17, 19)” representing a “‘Table’ of 30 (or 1/2 in sexagesimal) ending with its square $30^2 = 900$, written 15 (x 60)”. According to Tanret (1986: 147), “[c]’est la première tablette de Suse appartenant à ce type spécifique” (cf. the multiplication tablets MDP 27 61 and MDP 34 4) and it is mentioned also in Robson 2008: 156, where it is classified as “Type III tablet: verbose multiplication table” (Robson 2008: 331, table B.17), just like MDP 27 61 (Robson 2008: 330);
- in the same group of exercise texts, there is also a fragmentary clay cylinder with a thematic list of domesticated animals (Tanret and De Graef 2010, no. 23; mentioned also in Robson 2008: 156). The extant text “does not seem to have parallel elsewhere. It may

be a local Susa variant or a copy of a now lost Ur [= *ur₅-ra* = *hubullu*] III list” (Tanret and De Graef 2010: 249; tablet IV of Old Babylonian *ur₅-ra* = *hubullu* according to Robson 2008: 360, n. 17; tablet XIII in Tanret 1986: 145); it could therefore be further proof of the autonomy of the Susa scribal tradition (cf. Civil 1987: 140);

- the Old Babylonian school texts from Susa published by Dossin in MDP 18 1–66 (Dossin 1927: 1–22) and by Van der Meer (1935) in MDP 27. The tablets in MDP 18 are published only in cuneiform copy; some texts were already published by Scheil (see the “Avant-propos” by Scheil in Dossin 1927: I-II). The tablets in MDP 27 were found in 1934–1935 excavations in Ville Royale; this piece of information (reported also in Robson 2008: 331, asterisked footnote) does not come from Van der Meer 1935 but, fortunately, from Bruins and Rutten 1961: 1. Among fragments of lexical lists and lentils with exercises (see also the “proverbs” in Alster 1997: 335–337 [text edition] and 480 [comments]), one can also find 11 mathematical tablets (MDP 18 14; MDP 27 59, 60–61, 291–297; list according to Robson 2008: 330–331, Table B.17);
- a couple of fragmentary school lentils (M-498 and M-924) from Tall-e Malyan, attesting the existence of a school also in the east. They are briefly mentioned in Stolper 1982: 57, n. 52, with references to Stolper 1976: 90 (M-498) and 95 (M-924), and also in Lackenbacher 1998: 348. M-498 is available on CDLI (<http://cdli.ucla.edu/search/archival_view_new.php?ObjectID=P257472>, with a photo);
- 26 Old Babylonian mathematical school tablets published by Bruins and Rutten (1961; reviewed in Von Soden 1964) in MDP 34 and dated to the end of the Babylon I dynasty (Bruins and Rutten 1961: 1). They were found in Susa Ville Royale together with the other school texts previously published by Van der Meer in MDP 27 (Bruins and Rutten 1961: 1). MDP 34 16, 9, 7, 8, 19, 13, and 1 are analyzed also in Høyrup 2002. MDP 34 2 and 4 are presented (with photos) by M.W. Stolper in Harper et al. 1992: 276–278, nos. 194–195. These tablets are mentioned also in Robson 2008: 156; an updated bibliography is available in Robson 1999: 317 (after Robson 2008: 331, note to Table B.17). The mathematical problems were solved in previously unknown ways; sometimes, a procedure was qualified by the syntagm *kiâm Akkadî* “in the Akkadian way” (Bruins and Rutten 1961: 2; example of usage in a text: MDP 34 9:10 and 18), so the distinction between local (Elamite or Susian) and Mesopotamian tradition was clear and both were known in Susa;
- • two stray mathematical tablets from Susa, published in Scheil 1938: 92–103, and discussed also in Neugebauer and Sachs’s *Mathematical Cuneiform Texts* (Neugebauer and Sachs 1945: 6–10);
- 11 tablets (Steve et al. 1980: 123, TS.XII.1–12; TS.XII.9–10 are parts of the same tablet) hidden under a flat stone in the northern part of Ville Royale A (level XII), published by Labat (1974) in MDP 57 and concerning magic, extispicy, divination, physiognomy,

medicine, and teratology. These texts share some peculiar orthographic features (useful list in Rutz 2006: 70–71) which clearly distinguish them from the Mesopotamian writing tradition. In some of them “king” is written *LUGAL*, in others *3600* (Labat 1974: 5–6; *3600* is attested in MDP 57 4, 7, 10, and 11), a number that was read *šār* in Akkadian and was therefore a quasi-homophone of *šarru* “king”. Marginally, it should be noted that the transliteration *EŠŠANA* for *3600* is obsolete: according to Borger 2004: 434, no. 837, the correct name of the sign is *IŠŠEBU*; the understanding of this sign as *3600 šar* goes back to Scheil (1915; also Scheil 1932: 20), but his remarks had been forgotten, so they were unknown to Labat (1965b) and, therefore, suggested *ex novo* by Nougayrol (1972); Glassner 1991: 120, n. 100 later recalled these references, as did Rutz 2006: 84, comment to line 12;

- some fragments of proper literary texts from Susa like *The Palm and the Tamarisk* and *The Introduction of Grain to Sumer* (both in Sumerian) published in Cavigneaux 2003: 53–60 (mentioned also in Potts 2012: 52; see also the texts referenced in Cavigneaux 2003: 53, n. 1 and the list in Malayeri 2013: 374, §6.5);
- the surface find of an omen text at Chogha Pahn West, 23 km east of Susa, dated after the middle of the 2nd millennium BCE, published by Biggs and Stolper (1983);
- seven funerary tablets found in the access pit of a tomb to the east of Darius’ Palace in Susa (Tavernier 2013 with further references) and dated around the middle of the 2nd millennium BCE;
- at least 26 tablets with lexical lists, mathematical problems (mentioned in Robson 2008: 155–156; listed in Robson 2008: 330, Table B.17), and an extispicy text (HT 152 published in Daneshmand 2004; see also Negahban 1991: 105–106, and Pl. 55, no. 473; also color plate 4B) found at Haft Tappeh during Negahban’s excavations (the find-spot is not clear according to Robson 2008: 156) and dated around 1400 BCE. Recognition of the importance of Haft Tappeh as a school and scribal centre is growing year after year thanks to the discoveries of the mission led by B. Mofidi-Nasrabadi. A room which was probably a scriptorium or, at least, a place for clay tablet manufacturing with a small channel of water in the floor was recently found (Mofidi Nasrabadi 2012). The grave of a *puhu teppu*, maybe its vice-supervisor, was also discovered (Mofidi-Nasrabadi 2011). The origin of the settlement is now to be shifted back in time, while the end of the site may be connected to a mysterious heap of ca. 300 dead bodies (149 skulls + ca. 100~150 further skeletons; Mofidi-Nasrabadi 2014: 73–75 and Pl. 31 = p. 163, Photo 2).

Akkadian and Elamite

The above-listed “Akkadian” evidence from Susa complements the scarce evidence in the Elamite language. They are two faces of the same coin. Akkadian was part of the scribal

curriculum and was probably taught to Elamite-speaking students. Once they learned it, Akkadian cuneiform writing would have been easily applied to their mother tongue, but Akkadian still had to be used in most circumstances and was the preferred language for many textual typologies, at least in the first half of the 2nd millennium BCE (De Graef 2013: 273–274).

It is usually said that Humpan-u-mena (hyphenation of the name according to J. Tavernier) and Untash-Napirisha started a process of “Elamitization” of Susiana, forcing the use of Elamite language instead of Akkadian (e.g. Vallat 1998a: 307; cf. also the complementary process of Akkadianization of Susiana in the first half of the 2nd millennium according to, e.g., Lambert 1991). However, in a royal inscription of Untash-Napirisha from Chogha Zanbil (TZ 31), one can read:

i hil(i) Abullu Rabitu hiš-e

This gate, Great Gate (is) its name (TZ 31:5).

“Gate” is written *hil(i)* the first time, in Elamite, and *abullu* the second time, in Akkadian. Like Steve (1967: 65), I consider the syntagm *Abullu Rabitu* as an apposition to *hil(i)*. The meaning of *hil(i)* “gate” seems to be confirmed by the Achaemenid inscription XSd in which *e-el* in Elamite (with *e* pointing to an initial vowel, not granted by the VC sign *el* alone) and *KÁ* in Babylonian are qualified by a deictic pointing to the building (actually a gate) where the inscription was placed. The name of the gate in TZ 31 is actually in Akkadian. Other exemplars of the inscriptions have different names for different gates: *Abul Mišari* “Gate of Justice” from Akkadian *mīšaru* “justice”, *Abul ki-ša-a²-ti* “Gate of the Groves” (*Abul Kišāti* in Henkelman 2008: 441, n. 1023 and p. 450, n. 1044) from Akkadian *qištu* “grove” (corresponding to *husa* in Elamite, a garden with trees) or, in my opinion, from *kiššatu* “totality, world”; *Abul Šarri* “Gate of the King” (with the 3600 logogram) (Steve 1967: 63, “Var.”, discussed on p. 65; see also *Abullu Šaqtu* “Sublime Gate” in TZ 32:6 and *Abul Kinūni* “Gate of the Kiln” from *kinūnu* “kiln (for firing bricks)” in TZ 36:2 and TZ 37:3). TZ 31, together with the “twin” TZ 32, must have been an important inscription: it is quite long, in two frames, on large bricks. Eighteen exemplars either of TZ 31 or TZ 32 were reported as coming from the only extant external gate of Chogha Zanbil, according to Steve (1967: 60), who wrote also that the name is *Abullu Rabitu* in five exemplars; it is not explicitly said which name the other exemplars bore or if it was lacking or damaged. Therefore, it is not possible to assess the truth of Steve’s hypothesis that more than one name was given to each of the two entrances that form the gate. TZ 31 is thematically similar to DPf, one of the Achaemenid inscriptions on the southern platform wall at Persepolis (see Filippone 2012; the inscription is translated, for example, in Romagnuolo 2012).

Why are the names of the gates in Akkadian even in an Elamite text? Evidently, Akkadian

was the language that one had to use to give a name to a gate, perhaps because an Akkadian name was considered more prestigious. Curses were also often written in Akkadian, even in Elamite text. In the lower frame of TZ 32 (lines 8–10), the curse against the would-be destroyer of the Sian-kuk, the ceremonial complex of Chogha Zanbil, is in Akkadian, as is the curse (MDP 11 89) on the statue of Untash-Napirisha. Another Akkadian curse is in IRS 32, one of the monolingual Akkadian bricks of Untash-Napirisha. Maybe they were specifically addressed to a would-be Mesopotamian invader of Akkadian mother-tongue. However, there are also Elamite curses, for example, in the lower frame of TZ 31 (corresponding to the Akkadian curse in TZ 32:8–10) and on the statue of Napirasu (EKI 16).

It seems quite clear that there was not a preferred language in general but a preferred language in relation to a specified textual genre and also to a specific naming need. Akkadian was used to teach writing (Malayeri 2013) and therefore also to teach the Akkadian language: the language to be used in learned texts. The “little evidence of Elamite literary activity” will be increased by future “excavations at other [Elamite] major settlements, like Deh-e Now” according to Potts 2012: 52–53, but the balance will probably remain tipped towards Akkadian in this genre. Conversely, the political/ideological usage of language is more inclined towards accumulation, so Elamite was used in royal inscriptions together with Akkadian (and Sumerian in earlier times). These choices, in my opinion, were not imposed by the king, but by unwritten socio-cultural codes. The “wall” between Elamite and Akkadian was extremely permeable, especially in the direction towards Elamite. This suggests that we are facing a situation of bilingualism, but probably limited to the scribal class, that is, an elite bilingualism (Malbran-Labat 1996; cf. Lambert 1991). If this assumption is correct, the linguistic duality should not be mistaken for ethnic duality (cf. also Amiet 1979a and 1979b). The same caution should be used when applying linguistic duality to onomastic data: first of all, it should be proved that there was a perception and/or awareness of a cultural difference underlying the use of one name instead of another linguistically different one, and then that this difference mattered, especially in inclusive or multicultural societies (as opposed to exclusive or ethnocentric societies). Similarly, pantheons could not be easily isolated according to the linguistic origin of the names of the gods (see Basello 2012a: 188–193). Linguistical awareness is a “privilege” of the scribal class.

In sum, by now, it seems quite correct to state that the Akkadian language, that is, the Akkadian variety attested in Elam, is the key that opens the bolt of Elamite cuneiform culture.

Calendars

A shared calendar is essential in a human society: meetings, administrative operations, and legal deeds require dating. The calendar in Elam was probably lunisolar (Blois 2006), like the Babylonian one. This means that it was based on the synodic month, starting with the first

visibility of the moon on the western horizon at the sunset after the new moon; months probably roughly alternated between 29 and 30 days, resulting in an average duration of 29.5 days, which represents a good approximation to the synodic month. Since six months with 29 days and six months with 30 days result in a year of 354 days, which is about 11 days less than the tropical year based on the revolution of the earth around the sun, an additional month of 30 days was required every three years. The additional month is called intercalary month.

Unfortunately, it is difficult to know more about the Elamite calendar since the extant evidence is exclusively constituted by dating formulae. At least three different sets of month-names are attested from Elam (Cohen 1993; Basello 2002), besides the usual set of Babylonian month-names, usually written logographically (and therefore possibly read with a corresponding Elamite month-name).

The earliest known month-names, more than 12, are attested in the dating formulae of the Old Babylonian legal and administrative tablets from Susa. A group of these month-names, linguistically Akkadian, agrees with the ordered and originally complete list of month-names in the monthly funerary offerings on the Akkadian stela from the courtyard of the Tomb-Temple complex at Haft Tappeh (Reiner 1973). Some of these month-names are attested individually in the Akkadian tablets from Haft Tappeh (Herrero and Glassner 1991: 79–80), dated also with a year-name. This set of month-names could be conventionally called the Susiana set. It is attested also in a few Mesopotamian sources, including Babylonian menologies and Assyrian astrological reports (Basello 2002: 22).

In the administrative tablets from Tall-e Malyan, a different set of month-names is attested (Stolper 1984: 14–15), though not all the month-names are known. This could be conventionally called the Anshan set. In the Susa Acropolis tablets (MDP 9) the abbreviated logograms used in Mesopotamia to write the Babylonian month-names are attested; it is difficult to say how they were pronounced.

Later, in the Persepolis Fortification tablets, two sets of month-names are attested. The prevailing one is represented by Old Persian names rendered as loanwords, with particularly variable spellings which perhaps point to a low level of standardization (i.e. they were not taught at school; Basello 2006); they were linguistically studied by R. Schmitt (2003; see also Schmitt 2006). The other, less attested, set has been considered as Elamite in a cultural and linguistical sense, perhaps attested in tablets written in minor centres to the west of Persepolis. The latter set includes the month-names attested at Tall-e Malyan and could be considered as representing the Anshan set. Both the Old Persian and Anshan sets have been reconstructed thanks to the date formulae occurring in nearly all the tablets, and especially through the sequences of month-names corresponding to the period in which some food rations were provided by the central administration. There is an excess month-name, *rahal*, which could not be included in one or the other set; strangely enough, it is attested also in the Susa Acropolis tablets, in addition to the full set of Babylonian logograms (Basello 2002: 20–21 and

24). Most of the Persepolis Fortification tablets are also dated with the regnal year number of a king whose name is not written but was surely Darius the Great. The date formulae rarely included the day number (about 24 times in the tablets published in Hallock 1969; see, e.g., PF 77:11 or PF 1980:27–28). In the Persepolis Treasury tablets (Cameron 1948: 44–45, [Table 34.4](#)), only the Old Persian set is attested.

The Old Persian set was previously known to scholars through the Bisotun inscriptions of Darius the Great, where key events were dated by day number and month-name. The Old Persian spelling is attested in the Old Persian version, while the Elamite renderings are attested in Elamite; the Babylonian version used the standard Babylonian logograms. Since the day numbers correspond between the different languages, one can assume that the Babylonian and Old Persian calendars were synchronized. Due to standardization, it is also probable that the Anshan set of month-names represented the same calendar, changing only the names of the months, which, nevertheless, had fixed correspondences with the Old Persian set.

It is difficult to define the absolute position of the month-names in each text corpus. However, it seems possible to single out three shifts in the absolute position of the months: one before the Old Babylonian tablets from Susa, one before the administrative tablets from Malyan, and one before the Achaemenid period (Basello 2002: 26–27 and 36, “Synopsis”). These shifts could be due to wrong intercalary practices.

Sometimes, intercalary month-names occur in the Persepolis Fortification tablets. Intercalation is marked by *mešana* (*me-šá-na*) probably meaning “additional”, *2-umena* (*2-um-me-(man-)na*) “second” and *2-edana* (*2-e-da-na*) probably with the same meaning, *-(u)mena* (*-me-man-na*) probably implying the number 2 and meaning “second”, *KI-MIN* “the same” with reference to the preceding month-name, and *peptika* (*be-ip-ti-ka*₄) perhaps “hostile, opposing (month)” (Blois 2006: 49–51). Putting together all the intercalated months, it has been possible to provide a full table of correspondences with the Julian calendar (Henkelman 2008: 125, Table 32.4, based on Parker and Dubberstein 1956). The intercalations appear to follow a nearly regular pattern (Hartner 1985: 741–744), matching roughly the pattern later known as the Metonic cycle (Bowen and Goldstein 1988). It is therefore likely that the Achaemenid rule held a tight control over time, assuring a standard and shared calendar in the different areas of the empire. Ultimately, the regulation of time is required to control states stretching over wide areas and different cultural zones.

Metrology

Studies on Elamite metrology have been principally focused on the balance-weights found at Susa during the excavations of J. de Morgan (1897–1910) and R. de Mecquenem (1921–1933). The materials, mostly without known archaeological contexts, have been studied by M.C. Soutzo (1911), N.T. Belaiew (1934) and A.S. Hemmy (1938), with more recent analyses carried

out by the author (Ascalone and Peyronel 1999 and 2003; Ascalone 2011). A total of 584 weights were identified amongst the French excavation materials, but only a portion of them (248) allow for deeper chronological assessments. A limited number of later weights dating to the Middle Elamite period were found at Haft Tappeh (Negahban 1991: 44, Pl. 28), while no other evidence has been collected in the Iranian highlands, including Tall-e Malyan.

The Susiana plain

Sexagesimal, bisexagesimal, and decimal counting systems are contemporarily attested in the numerical signs on Susa III-type tablets, as well as in the archaic texts from Uruk, but there are no known relations between the Susa III (Proto-Elamite) texts and the excavated weighing evidence. The absence of stratigraphic references for the weights from Susa forces us to carry out a partial analysis, relying mainly on those specimens found in well-defined archaeological context, and hampers the establishment of a correlation between textual and archaeological evidence in the old period of the city.

The Susa weights, dating mainly to the end of the 3rd/beginning of the 2nd millennium BC, are standardized in shape and material, with a predominant use of hematite for ovoid, duck, or ‘pebble’ shapes (Tab. 1). The local system, well-known in the western alluvium, is Mesopotamian, with the shekel (*šiq̄lu*) based on a unit of 8.40 g in a sexagesimal system, where the mina (ca. 504 g = *manû*) and the talent (30.240 g = *biltu*) were respectively counted as 60 and 3600 shekels. The same sexagesimal division is attested for the sub-multiple of the unit calculated as 0.046 g (ratio 1/180) (Tab. 2). However, different foreign weighing systems are documented at Susa during the Simashki and Sukkalmakh dynasties, confirming the role played by the Susiana plain in the commercial relations and cultural transmission among the main regions of the Near East throughout the Bronze Age (Tab. 3). The shekels (7.83 g, 9.40 g, and 11.75 g), related to the western mina (ca. 470 g), are attested in the Susa corpus, as well as Harappan weights, based on a value of 13.65 g (an imported cubic weight from the Indus valley was also found; see Amiet 1986: 143, Figure 93). A specific category of weights, the specimens with the inscription “*su*” on their surface, should be considered particularly significant for their historical meaning. They represent the value of so-called “hybrid mina” (Zaccagnini 1999–2001: 40) counted to ca. 564 g (= 9.40 × 60), and used to facilitate weighing operations and the equivalence between the local system and the above-mentioned western units (Ascalone 2011: Tab. 1).

[Table 34.1 Material and shapes of weights from Susa.](#)

<i>Shape Material</i>	<i>Ovoid</i>	<i>Cone</i>	<i>Cube</i>	<i>Cylind.</i>	<i>Discoid</i>	<i>Duck</i>	<i>Hemisph.</i>	<i>Frog</i>	<i>Insect</i>	<i>Pebble</i>	<i>Lion</i>	<i>Tot.</i>
AGATE							I					I
BITUMINOUS						3						3
LIMESTONE	I				8	4				38		53
CARNELIAN	.					I						I
JASPER			I									I
DIORITE					I							I
HEMATITE	74	I		2	55	17	7	2	4	16	I	179
MARBLE						I						I
BLACK ST.					4							4
CHERT						I						I
TOT.	75	I	I	2	68	27	8	2	4	54	I	

The wide number of foreign classes and the identification of equivalence operations among different systems in a Bronze Age site is not an anomaly; however, the high number of weights (97) related to the western mina at Susa appears meaningful as a further contribution to the Elamite presence in Inner Syria and Upper Mesopotamia in the first quarter of the 2nd millennium BC. A new policy towards the western region is indeed confirmed by Mari's texts dating to the Zimri-Lim period, in which messengers of Elam (to Qatna) and the alliance between Elam and Eshnunna against the land of Idamaraz, with the consequent battle of Razama, are recorded. After the death of Shamshi-Adad, a broad Elamite expansion towards north-west seems to be attested (several Syrian and Babylonian rulers styled themselves "Sukkalmakh's son"; see Charpin and Durand 1991: 64–65), probably to control the Anatolian market and to have the access to raw materials. Seen from this perspective, the high presence of western metrological values in the corpus of Susa weights, dating to the first centuries of the 2nd millennium BC, could be part of the widest dossier on the new Elamite policy in Diyala, Upper Mesopotamia, and Inner Syria before the rise of Hammurabi.

[Table 34.2 The local system at Susa](#)

<i>Ratio</i>	<i>Number of weights</i>	<i>Average Values (g)</i>
1/8	1	1,07
1/6	4	1,41
1/4?	4	2,16
1/3	11	2,81
1/2	12	4,23
2/3	17	5,54
1	22	8,40
1+1/2	1	12,75
2	16	16,61
3	10	24,93
5	8	41,30

6	1	49,25
10	7	82,61
30	3	249,60
180	2	1481,00
300	2	2454,00
TOT.	121	

[Table 34.3 Metrological distribution of weights from Susa not belonging to the local system](#)

<i>Ratio</i>	<i>7,83 g</i>	<i>9,40 g</i>	<i>11,75 g</i>	<i>13,65 g</i>
1/16	2			1
1/12		1		
1/8	3			3
1/6	6	4		
1/4	2	8	3	7
1/3	5	4		
1/2	7	6	4	2
2/3	7	2		
1	7	3	3	1
1+1/3	1			
2	8	1		1
3	3			
4	1	2		
10	1			
12		1		
20	1			
40				1
80				1
100				1
300	1			
TOT.	55	32	10	18

Unfortunately, the absence of well-defined archaeological contexts at Susa prevents a diachronic analysis focused on the understanding of the historical and metrological development of weights in relation to Elamite power and royal dynasties. However, as attested in a group of Anshanite seals (Ascalone 2013), the justice and rectitude associated with weighing procedures, as major aspects of rightful kingship, are also known in Elamite history: the title of Ippir, frequently used by the Sukkalmakh rulers, *in primis* Kuk-Nashur I and Attahushu (Potts 1999: Tab. 6.1), means “magistrate of Susa” and confirms the strong relation between the king and fair justice, as it is known in the inscriptions on the mud-bricks from

Susa, in which it is recalled: “Attahushu, the shepherd of Inshushinak, sister’s son of Silhaha, had a stele of justice erected in the marketplace. Whoever does not know the just price, may the sun inform him” (IRS 12). The same Attahushu, Sukkal and Ippir of Susa, is indeed mentioned by Middle Elamite kings as the author of a stele of justice (“the Great Table”), dedicated to the sun god, fixing the official weights, the prices of the main goods (Scheil 1939: 5), and the rules for economic transactions (Scheil 1932: nos. 197:5 and 242). All this evidence seems to be useful for preliminary observations on weighing procedures and their meaning in Elamite history. After the Akkadian and Ur III periods, it seems that a standardization of weights and measures was realized in the Elamite kingdom under the Attahushu’s regency at the beginning of the Sukkalmakh dynasty, when new titles and propaganda codes were established. If we consider these royal inscriptions as a product of the Elamite regency (on the model of those from Mesopotamia), we should also conceive an effective action aimed at standardizing economic transactions through the fixing of official weights. Attahushu also seems to have been very active in construction and restoration programs at Susa, where he built new religious buildings for Pininkir, Narunte, and Anunitum, a new fortified palace on the opposite bank of the Ulai river, and a bridge over it. The architectonical program of Attahushu followed a new institutional message, in which the creation of the new was coupled with the respect for the old, in a project now focused on the normalization of the administrative values in order to assure unity, order, and security for all the components (eastern, western, tribal, alluvial, highlands, nomadic, sedentary, etc.) of the Elamite kingdom. On these bases, we should assume that Attahushu’s regency brought forth a “standardization of accounting” in order to facilitate equivalences across the country, as well as, in the same period, the standardization of titles and figurative apparatuses by the central power (see Ascalone, Chapter 31 in this volume). The standardization of measures under the Sukkalmakh dynasty therefore followed the broadest official program, including seals, rock art, religious reforms, settlement planning, and architectural developments. As in the past for the Ur III kings, the codification of laws and the standardization of measures were instruments to guarantee legal uniformity across the empire. These mechanisms were used as vehicles for a propaganda aimed at enforcing the perception of a good government and, at the same time, overcoming the local and tribal traditions of the Elamite kingdom.

[Table. 34.4 Weights and possible-weights* from Haft Tepe](#)

<i>Context</i>	<i>Material</i>	<i>Shape</i>	<i>Condition</i>	<i>Mass (G)</i>	<i>Reference</i>
Trenches PXXXIV-TXXXIV (between Terrace Complex I and II)	Limestone	Ovoid*	Broken	4.355,0+x	Negahban 1991: 44, pl. 28, 199a
Trenches PXXXIV-TXXXIV (between Terrace Complex I and II)	Limestone	Ovoid	Chipped at the ends	85,0+x	Negahban 1991: 44, pl. 28, 199b
Trenches PXXXIV-TXXXIV (between Terrace Complex I and II)	Limestone	Spherical*	Good	220,0	Negahban 1991: 44, pl. 28, 199c
Trenches PXXXIV-TXXXIV (between Terrace Complex I and II)	Limestone	Spherical*	Good	290,0	Negahban 1991: 44, pl. 28, 199d
Trenches PXXXIV-TXXXIV (between Terrace Complex I and II)	Limestone	Spherical*	Good	320,0	Negahban 1991: 44, pl. 28, 199e
Trenches PXXXIV-TXXXIV (between Terrace Complex I and II)	Limestone	Spherical with grooves	Good	2.275,0	Negahban 1991: 44, pl. 28, 199f
Trenches PXXXIV-TXXXIV (between Terrace Complex I and II)	Hematite	Ovoid	Missing a part	15,0	Negahban 1991: 44, pl. 28, 199g
Trenches PXXXIV-TXXXIV (between Terrace Complex I and II)	Limestone	Spherical*	Good	25,0	Negahban 1991: 44, pl. 28, 199h
Trenches PXXXIV-TXXXIV (between Terrace Complex I and II)	Limestone	Spherical*	Good	9,0	Negahban 1991: 44, pl. 28, 199i
Trenches PXXXIV-TXXXIV (between Terrace Complex I and II)	Limestone	Spherical*	Good	115,0	Negahban 1991: 44, pl. 28, 199j
Trenches PXXXIV-TXXXIV (between Terrace Complex I and II)	Limestone	Spherical*	Good	215,0	Negahban 1991: 44, pl. 28, 199k
Trenches PXXXIV-TXXXIV (between Terrace Complex I and II)	Limestone	Spherical*	Good	220,0	Negahban 1991: 44, pl. 28, 199l

The evidence dating to the Middle Elamite period is very scant, the only (and partial) documentation being from Haft Tappeh, where the real function of the published objects remains uncertain (Tab. 4). Unfortunately, only three items could be considered weights and just one of them is conserved well enough to allow for a metrological analysis. The specimen, a spherical weight with grooves to insert a rope, should be considered equal to five western minas underestimated at 455 g, confirming the use of the western mina (besides the local or Mesopotamian one) in the Elamite kingdom also during the second half of the 2nd millennium BC, as in contemporary Syrian sites such as Qatna (Turri 2015: 477).

The Iranian plateau

Our knowledge of the weighing materials (weights, scales, and/or other metrological evidence) is very scant or totally absent in the peripheral Elamite world: 12 weights (one cubic-shaped) were found in the Iranian excavations at Konar Sandal South but are not yet published (Pittman 2016: 65); Harappan weights, ingots, bars in copper, and other specimens were found at Miri Qalat but have not yet been exhaustively published (Besenval 1994: 89). In the main excavations of eastern Iran (Shahdad, Tepe Hissar, Shahr-e Sokhta, Tall-e Malyan), the weights were generally not identified, or they were ignored or not published. In some cases the weights were not evaluated as an important line of evidence for the Bronze Age economy, while in other cases their real meaning and value were not identified (Tabs. 3 and 5).

Table. 34.5 Weights or possible-weights from Iranian plateau

<i>Site</i>	<i>Literature</i>	<i>Number</i>	<i>Period</i>	<i>Context</i>	<i>Material</i>	<i>Shape</i>	<i>Measures (Cm)</i>	<i>Condition</i>	<i>Reference</i>
Shah Tepe	Pestle	601	II		Diorite	Truncated cone		Raised	Arne 1945: 279–280, pl. 72, fig. 579 c
Shah Tepe	Polishing stone		III	F III	Stone	Ellipsoid		Good	Arne 1945: 279–280, pl. 72, fig. 580 a
Shah Tepe	Black whetstone			E II	Stone	Ellipsoid			Arne 1945: 279–280, pl. 72, fig. 580 b
Shah Tepe	Polishing stone	422		C II	Stone	Ovoid		Missing part	Arne 1945: 279–280, pl. 72, fig. 580 c
Shah Tepe	Polished pebble			H I	Stone	Ovoid		Chipped	Arne 1945: 279–280, pl. 72, fig. 580 d
Shah Tepe	Polished pebble	1193	II	E III	Stone	Ellipsoid		Good	Arne 1945: 279–280, pl. 72, fig. 580 e
Shah Tepe	Polishing stone			F III	Stone	Paralelepipid		Good	Arne 1945: 279–280, pl. 72, fig. 580 f
Tepe Hissar	Ring weight								Schmidt 1933: 360
Tepe Hissar	Weight	H 2095	IC	Refuse DH 69	Stone	Ovoid with handle	26,5 × 17,0 × 2,2	Missing part	Schmidt 1937: 58, pl. 18: A
Tepe Hissar	Pestle	H 2645	I	DG 96	Stone	Ovoid	7,0 × 4,0	Good	Schmidt 1937: 58, pl. 17
Tepe Hissar	Pestle	H 1722	II	DF 78	Hematite	Truncated cone	3,5 × 3,4	Good	Schmidt 1937: 122, pl. 31
Tepe Hissar	Weight	H 2772	IIIB	Burned Building	Red-brown stone	Ovoid	3,9 × 3,2 × 1,68	Burned	Schmidt 1937: 221, pl. 63, fig. 90
<i>Site</i>	<i>Literature</i>	<i>Number</i>	<i>Period</i>	<i>Context</i>	<i>Material</i>	<i>Shape</i>	<i>Measures (Cm)</i>	<i>Condition</i>	<i>Reference</i>
Tepe Hissar	Weight	H 2896	IIIB	Burned Building	Red-brown stone	Ovoid	2,8 × 2,3 × 1,7	Burned	Schmidt 1937: 221, pl. 63
Tepe Hissar	Pestle	H 3079	III	CF 89	Diorite	Ovoid	4,4 × 6,3	Good	Schmidt 1937: pl. 63
Tepe Hissar		H 1819	III		Stone	Ovoid with groove		Good	Schmidt 1937: pl. 63
Tepe Hissar		H 1685	III		Stone	Ovoid with flat base		Good	Schmidt 1937: pl. 63
Shahdad	Rounded stone	0359		Grave 40 (A)	Stone	Oval	5,20		Hakemi 1997: 201
Shahdad	Ellipsoid stone	0545		Grave 60 (A)	Stone	Ellipsoid	18,5 × 6,0		Hakemi 1997: 224
Shahdad	Ellipsoid grooved stone	0897		Grave 96 (A)	Stone	Ellipsoid	13,6 × 14,2		Hakemi 1997: 255
Shahdad	Elliptical grey stone	2233		Grave 192 (A)	Stone	Elliptic	16,0 × 14,0		Hakemi 1997: 352
Shahdad	Flat stone	2264		Grave 193 (A)	Stone	Ovoid			Hakemi 1997: 354
Shahdad	Conical stone	2518		Grave 209 (A)	Stone	Conical	13,0 × 32,0		Hakemi 1997: 371
Shahr-i Sokhta	Flat pebble	7122		Grave 130	Grey limestone	Oval flat	5,8 × 4,1	Good	Piperno – Salvatori 2007: 175, fig. 375
Shahr-i Sokhta	Flat pebble	7145		Grave 132	Grey limestone	Oval flat	5,0 × 4,3 × 0,4	Good	Piperno – Salvatori 2007: 180, fig. 389

Shahr-i Sokhta	Flat pebble	7146	Grave 132	Grey limestone	Oval flat	8,4 × 6,2 × 1,1	Good	Piperno – Salvatori 2007: 180, fig. 389
Shahr-i Sokhta	Flat pebble	7672	Grave 311	Grey limestone	Circular flat	6,7 × 1,3	Good	Piperno – Salvatori 2007: 209, fig. 461
Shahr-i Sokhta	Flat pebble	7057	Grave 415	Grey limestone	Ovoid	7,5 × 6,6	Good	Piperno – Salvatori 2007: 224, fig. 501
Shahr-i Sokhta	Flat pebble	8329	Grave 726	Limestone	Ovoid	8,7 × 7,2 × 1,0	Good	Piperno – Salvatori 2007: 281, fig. 653
Mundigak	Weight	I: 5		Limestone	Ovoid with hole			Casal 1961: 234, fig. 135, 4
Mundigak	Weight	III: 4		Stone	Ovoid with groove			Casal 1961: 237, fig. 136, 26

In the Gorgan plain, evidence was collected from stratum I of Tepe Hissar, where a “ring weight” was published without drawings or photos; other evidence is from the Hissar IC refuse layer, where an irregular sandstone object with grip was considered a possible weight by the excavators. A biconical object was identified in the Hissar II period, while in the same archaeological context, a chipped irregular stone was also proposed as a possible weight. Later evidence was identified in a room of the Hissar IIIB Burned Building, where remains of charred wheat also occurred; in the same archaeological context a well-polished stone weight, in archaeological association with fragments of oval stones with cross-shaped grooves on their surface, was found. Unclear is the evidence from Shah Tepe, where possible weights were included in a broad documentation of pebbles, pestles, and unidentified stone objects. At Shahdad, lying between the Oxus regional complex and the Jiroft civilization, weights were not identified by the excavators, although numerous pebbles, ellipsoid, cylindrical, and conical stones were found. Two objects were considered weights at Mundigak in the eastern Hilmand valley: the first one is a limestone ovoid-shaped object with a perforation in the upper part from phase I.5 dating to the Chalcolithic, and the second one is an ovoid stone, with an incised line on the surface for suspension, known in phase III.4 but attested also in several exemplars in phase IV.1 (end of the 3rd millennium BC). At Shahr-e Sokhta, in the south-western corner of the Hilmand valley, weights were not published, however, one could take into consideration the six pebbles found in five different graveyards in the excavations in the necropolis area. Further evidence is known from Baluchistan, at Nal, Shahi Tump, Bampur, Hussaini, and Kinneru-damb, where a specific class of weights, strongly standardized in shape, dimension, and material, has been identified (Tab. 6). The weights from Nal appear to be particularly meaningful for their chronology and mass. Indeed, all weights, dating between the end of the 4th and the mid-3rd millennium BC, must be related to the later Harappan system, well known only in the second half of the 3rd millennium BC in the Indus valley, allowing us to believe that there was a relationship between the origin of the Harappan system and the oldest eastern Baluchistan human organizations.

[Table. 34.6 Weights from Baluchistan, Margiana and Makran coast](#)

<i>Site</i>	<i>Date (Bc)</i>	<i>Literature</i>	<i>Number</i>	<i>Period</i>	<i>Material</i>	<i>Shape</i>	<i>Measures (Cm)</i> <i>Mass (Kg)</i>	<i>System</i>	<i>Reference</i>
Nal	3300–3100	Weight	0414–004	I	Gray stone	Egg-shaped with hole	16,50 × 26,0 13,82	1000 × 13,82 30 × 460,66	Franke – Cortesi 2015: n. 631
Nal	3300–3100	Weight	0420–009	I	Diorite?	Egg-shaped with hole	14,5 × 23,0 10,36	750 × 13,81 20 × 518,00	Franke – Cortesi 2015: n. 632
Nal	3300–3100	Weight	0411–002	I	Gray stone	Egg-shaped with hole	15,3 × 23,0 11,47	11,47+x kg	Franke – Cortesi 2015: n. 633
Nal	3300–3100	Weight	0410–001	I	Gray stone	Egg-shaped with hole	13,5 × 23,0 9,64	700 × 13,77 20 × 482,00	Franke – Cortesi 2015: n. 634
Nal	3300–3100	Weight	0413–003	I	Grey light stone	Egg-shaped with hole	18,0 × 23,5 13,65	1000 × 13,65 30 × 455,00	Franke – Cortesi 2015: n. 635
Nal	3300–3100	Weight	0419–008	I	Beige stone	Egg-shaped with hole	13,0 × 22,0 8,15	600 × 13,58 1000 × 8,15	Franke – Cortesi 2015: n. 636
Nal	3300–3100	Weight	0415–005	I	Beige stone	Egg-shaped with hole	14,0 × 27,3 11,97	900 × 13,30 25 × 478,00	Franke – Cortesi 2015: n. 637
Nal	3300–3100	Weight	0416–006	I	Beige stone	Egg-shaped with hole	18,5 × 21,0 8,91	650 × 13,70	Franke – Cortesi 2015: n. 638
Nal	3300–3100	Weight	0426–013	I	Grey light stone	Egg-shaped with hole	13,0 × 22,0 9,60	700 × 13,71 20 × 480,00	Franke – Cortesi 2015: n. 639
Nal	3300–3100	Weight	0418–007	I	Beige stone	Egg-shaped with hole	13,5 × 21,0 7,39	713,43 × 550 15 × 492,00	Franke – Cortesi 2015: n. 640
Nal	2700–2400	Weight	0427–014	III?	Light brown stone	Egg-shaped with hole	16,0 × 19,5 8,15	600 × 13,58 1000 × 8,15	Franke – Cortesi 2015: n. 641
Nal	2300–2200	Weight	0422–011	IV?	Grey stone	Rounded with flat bases	15,5 × 29,0 16,48	1200 × 13,73 2000 × 8,24 25 × 470,85	Franke – Cortesi 2015: n. 642
Nal	2300–2200	Weight	0421–010	IV?	Grey stone	Rounded with groove with flat bases	12,0 × 28,0 11,39	25 × 455,60?	Franke – Cortesi 2015: n. 643
Shahi-Tump	3200–2800	Weight	Grave 402	Makran I Sh.Tump IIIa	Lead	Ovoid with handle	13,5 × 16,7 15,0	1100 × 13,63 30 × 500,00 (1/2 Mesopotamian talent)	Miller – Besenval – Bourgarit 2004
Bampur	3000–1800	Object	Bam. A.311a		Limestone	Spherical			Stein 1937: pl. X
Bampur	3000–1800	Object	Bam. A.422		Limestone	Ovoid with truncated ends			Stein 1937: pl. X
Bampur	3000–1800	Object	Bam. A. 39		Stone	Hemispheric			Stein 1937: pl. X
Bampur	3000–1800	Object	Bam. A. 371		Stone	Circular flat			Stein 1937: pl. XXX
Hussaini		Object			Stone	Spheric			Stein 1937: pl. XXX
Kinnerudamb		Weight			Stone	Egg-shaped with hole	13,60 kg		De Cardi 1983: pl. VIb
Gonur depe	2200–1800	Statuette	Grave 1200/2000	Gonur Phase	Green stone	Duck			Rossi-Osmida 2002: 98–101

Abbreviations

- Arg. Three fragmentary Elamite tablets from the excavations of Armavir-blur in Diakonoff and Jankowska 1990; see also Koch 1993, Vallat 1995 and 1997.
- CDLI Cuneiform texts in the Cuneiform Digital Library Initiative, www.cdli.ucla.edu.
- DPf Elamite royal inscription of Darius on the southern platform wall at Persepolis; transliteration, transcription, and translation in Romagnuolo 2012.
- EKI Elamite royal inscriptions in König 1965.
- IRS Royal inscriptions from Susa (and Chogha Zanbil) in Malbran-Labat 1995.

- MAD Old Akkadian tablets in Gelb 1952.
1
- MDP Legal tablets in Akkadian allegedly from Izeh/Malamir in Scheil 1902: 169–94.
4 1–
16
- MDP Elamite administrative tablets from the Acropolis of Susa in Scheil 1907.
9
- MDP Cuneiform texts in Scheil 1911.
11
- MDP Sumerian and Akkadian cuneiform texts in Dossin 1927.
18
- MDP Akkadian legal tablets from Susa in Scheil 1930.
22
- MDP 297 assorted school texts in Akkadian from Susa in Van der Meer 1935.
27
- MDP Akkadian mathematical texts from Susa in Bruins and Rutten 1961.
34
- MDP Elamite tablets in Paper 1954.
36 1–
3
- MDP Learned texts in Akkadian from Susa in Labat 1974.
57
- MLC Materials in the J.P. Morgan Library Collection, now housed in the Yale Babylonian Collection.
- Nin So-called letters of Ninive (see Vallat 1988 and 1998b; Reade 1992 and 2000) in Elamite. Nin 1–25: Weissbach 1902 (only in cuneiform copy); Nin 1, 5, 10, 13 e 14: Hinz 1986 (transliteration and translation); Nin 14 (83–1–18, 307): Walker 1980: 79 (small fragment joined to Nin 14) and 80, Figure 4 (only in cuneiform copy) see also Gorris 2013.
- PF Persepolis Fortification tablets in Hallock 1969.
- PT Persepolis Treasury tablets in Cameron 1948.
- SAA Neo-Assyrian tablets in Parpola 1993.
10
- TZ Texts (mainly royal inscriptions) in Elamite and Akkadian from Chogha Zanbil in Steve 1967.
- XSd Trilingual Achaemenid royal inscription of Xerxes found in some fragmentary exemplars on at least two of the four column bases in the so-called Gate of Darius at Susa (Vallat 1974).

Note

References

- Amiet, P. 1979a. Archaeological Discontinuity and Ethnic Duality in Elam. *Antiquity* 53: 195–204.
- . 1979b. Alternance et dualité. Essai d'interprétation de l'histoire élamite. *Akkadica* 15: 2–22 and Pls. 1–2.
- . 1986. *L'âge des échanges inter-iraniens: 3500–1700 avant J.-C.* Paris.
- Alster, B. 1997. *Proverbs of Ancient sumer. The World's Earliest Proverb Collections*, 2 vols. Bethesda, MD: CDL Press.
- Arne, T.J. 1945. *Excavations at Shah Tepé, Iran*. Stokholm.
- Ascalone, E. 2011. Mina e doppia mina. In: Ascalone, E. and Peyronel, L. (eds.) *Studi italiani di metrologia ed economia del Vicino Oriente dedicati a Nicola Parise in occasione del suo settantesimo compleanno*, Studia Asiana 7. Rome, 57–64.
- . 2013. Sealing and Weighting. The Art of Power during Sukkalmakh Period. *Iranian Archaeology* 4: 50–57.
- Ascalone, E. and Peyronel, L. 1999. Typological and Quantitative Approach to the Ancient Weight System. Susa, Persian Gulf and Indus Valley from the End of the III Millennium to the Beginning of the II Millennium BC. *Altorientalische Forschungen* 26/2: 252–277.
- . 2003. Meccanismi di scambio commerciale e metrologia pre-monetaria nell'Asia Media, in India e nel Golfo Persico durante l'Età del Bronzo. Spunti per una riflessione sulle sfere d'interazione culturale. *Contributi e materiali di archeologia orientale* 9: 321–421.
- Basello, G.P. 2002. Babylonia and Elam: the Evidence of the Calendars. In: Panaino, A.C.D. and Pettinato, G. (eds.) *Ideologies as Intercultural Phenomena. Proceedings of the Third Annual Symposium of the Assyrian and Babylonian Intellectual Heritage Project Held in Chicago, USA, October 27–31, 2000*, Melammu Symposia 3, with the collaboration of G.P. Basello and A. Piras. Milano: Università di Bologna – Istituto Italiano per l'Africa e l'Oriente, 13–36.
- . 2004. Elam between Assyriology and Iranian Studies. In: Panaino, A.C.D. and Piras, A. (eds.) *Schools of Oriental Studies and the Development of Modern Historiography. Proceedings of the Fourth Annual Symposium of the Assyrian and Babylonian Intellectual Heritage Project Held in Ravenna, Italy, October 13–17, 2001*, Melammu Symposia 4, with the collaboration of G.P. Basello. Milano: Università di Bologna – Istituto Italiano per l'Africa e l'Oriente, 1–40.
- . 2006. Old Persian in Elamite: The Spellings of Month-names. In: Panaino, A. and Piras, A. (eds.) *Proceedings of the 5th Conference of the Societas Iranologica Europæa held in Ravenna, 6–11 October 2003*, vol. I: *Ancient & Middle Iranian Studies*. Milano: Mimesis, 19–38 and Pls. I–IV.
- . 2012a. L'uomo e il divino nell'antico Elam. In: Basello, G.P., Ognibene, P. and Panaino, A. (eds.) *Il mistero che rivelato ci divide e sofferto ci unisce. Studi pettazzoniani in onore di Mario Gandini*, special supplement to *Strada maestra = Indo-Iranica et Orientalia*, Series Lazur 6. San Giovanni in Persiceto, Bologna: Biblioteca Comunale "G.C. Croce", 143–220.
- . 2012b. Elamische und altpersische Schriften. In: Steymans, H.U. and Staubli, T. (eds.) *Von den Schriften zur (Heiligen) Schrift. Keilschrift, Hieroglyphen, Alphabete und Tora*. Freiburg (CH): BIBEL+ORIENT Museum – Stuttgart: Katholisches Bibelwerk, 70–71.
- . 2013. From Susa to Persepolis: The Pseudo-Sealing of the Persepolis Bronze Plaque. In: De Graef and Tavernier 2013:

- Belaiew, N.T. 1934. Métrologie Elamite. Examen préliminaire des documents pondéraux. Fouilles de Suse 1921–1933. In: Allotte de la Fuÿe, [F.-M.], Belaiew, N.T., Mecquenem, R. de and Unvala, J.-M., *Archéologie, métrologie et numismatique susiennes*, Mémoires de la Mission Archéologique de Perse 25. Paris, 134–176.
- Besenval, R. 1994. The 1992–1993 Field-Seasons at Miri Qalat: New Contributions to the Chronology of Protohistoric Settlement in Pakistani Makran. In: Parpola, A. and Koskikallio, P. (eds.) *South Asian Archaeology 1993*. Helsinki, 81–91.
- Biggs, R.D. and Stolper, M.W. 1983. A Babylonian Omen Text from Susiana. *Revue d'Assyriologie et d'Archéologie Orientale* 77: 155–162.
- Blois, F. de 2006. Lunisolar Calendars of Ancient Iran. In: Panaino, A. and Piras, A. (eds.) *Proceedings of the 5th Conference of the Societas Iranologica Europæa held in Ravenna, 6–11 October 2003*, vol. I: *Ancient & Middle Iranian Studies*. Milano: Mimesis, 39–52.
- Borger, R. 2004. *Mesopotamisches Zeichenlexikon*, Alter Orient und Altes Testament 305. Münster: Ugarit-Verlag (2nd edition: 2010).
- Bowen, A.C. and Goldstein, B.R. 1988. Meton of Athens and Astronomy in the Late Fifth Century B.C. In: Leichty, E., Ellis, M. deJ. and Gerardi, P. (eds.) *A Scientific Humanist. Studies in Memory of Abraham Sachs*. Philadelphia, 39–81.
- Bruins, E.M. and Rutten, M. 1961. *Textes mathématiques de Suse*, Mémoires de la Mission Archéologique en Iran 34. Paris: Librairie Orientaliste Paul Geuthner (reviewed in Von Soden 1964).
- Cameron, G.G. 1948. *Persepolis Treasury Tablets*, Oriental Institute Publications 65. Chicago, IL: The University of Chicago Press.
- Cardi, B. de 1983. *Archaeological Surveys in Baluchistan, 1948 and 1957*. London.
- Casal, J.M. 1961. *Fouilles de Mundigak*, Mémoires de la Délégation Archéologique Française en Afghanistan 17/1–2. Paris.
- Cavigneaux, A. 2003. Fragments littéraires susiens. In: Sallaberger, W., Volk, K. and Zgoll, A. (eds.) *Literatur, Politik und Recht in Mesopotamien. Festschrift für Claus Wilcke*, Orientalia Biblica et Christiana 14. Wiesbaden: Harrassowitz Verlag, 53–62.
- Cohen, M.E. 1993. *The Cultic Calendars of the Ancient Near East*. Bethesda, MD: CDL Press.
- Charpin, D. and Durand, J.-M. 1991. La suzeraineté de l'empereur (sukkalmaḥ) d'Elam sur la Mésopotamie et le 'Nationalisme' Amorrite. In: De Meyer, L. and Gasche, H. (eds.) *Mésopotamie et l'Elam, Mesopotamian History and Environment Occasional Publications 1*. Ghent: 59–66.
- Civil, M. 1987. The Early History of HAR – ra: The Ebla Link. In: Cagni, L. (ed.) *Ebla 1975–1985. Dieci anni di studi linguistici e filologici. Atti del convegno internazionale (Napoli, 9–11 ottobre 1985)*, Series Minor 27. Napoli: Istituto Universitario Orientale, 131–158.
- Cros, G. 1910. *Nouvelles fouilles de Tello*, Mission Française de Chaldée, publiées avec le concours de L. Heuzey and F. Thureau-Dangin. Paris: Ernest Leroux, éditeur.
- Cunningham, G. 1997. 'Deliver Me from Evil'. *Mesopotamian incantations 2500–1500 BC*, Studia Pohl: Series Maior 17. Roma: Editrice Pontificio Istituto Biblico.
- Daneshmand, P. 2004. An Extispicy Text from Haft-Tappe. *Journal of Cuneiform Studies* 56: 13–17.
- De Graef, K. 2013. The Use of Akkadian in Iran. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford – New

- York: Oxford University Press, 263–282.
- De Graef, K. and Tavernier, J. (eds.) 2013. *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*, Mémoires de la Délégation en Perse 58. Leiden – Boston: Brill.
- Desset, F. 2012. *Premières écritures iraniennes. Les systèmes proto-élamite et élamite linéaire*, Series Minor 76. Napoli: Università degli Studi di Napoli “L’Orientale”.
- Diakonoff, I.M. and Jankowska, N.B. 1990. An Elamite Gilgameš Text from Argistihenele, Urartu (Armavir-blur, 8th century B.C.). *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 80: 102–120.
- Dossin, G. 1927. *Autres textes sumériens et accadiens*, Mémoires de la Mission archéologique de Perse 18. Paris: Librairie Ernest Leroux.
- Filippone, E. 2012. DPd/DPe and the Political Discourse of King Darius. In: Basello, G.P. and Rossi, A.V. (eds.) *DARIOSH Studies II. Persepolis and Its Settlements: Territorial System and Ideology in the Achaemenid State*, Series Minor 78. Napoli: Università degli Studi di Napoli “L’Orientale”, 101–119.
- Fincke, J.C. 2003–2004. The Babylonian Texts of Nineveh. Report on the British Museum’s *Ashurbanipal Library Project*. *Archiv für Orientforschung* 70: 111–149.
- Frahm, E. 2011. Keeping Company with Men of Learning: The King as Scholar. In: Radner and Robson 2011: 508–532.
- Franke, U. and Cortesi, E. 2015. Central Baluchistan until the Mid-3rd Millennium BCE. Catalogue. In: Franke, U. and Cortesi, E. (eds.) *Lost and Found. Prehistoric Pottery Treasures from Baluchistan*. Berlin, 283–287.
- Gelb, I.J. 1952. *Sargonic Texts from the Diyala Region*, Materials for the Assyrian Dictionary 1. Chicago, IL: The University of Chicago Press.
- . 1961. *Old Akkadian Writing and Grammar*, Materials for the Assyrian Dictionary 2. Chicago, IL: The University of Chicago Press, 2nd edition, revised and enlarged (first edition: 1952).
- George, A.R. 2013. *Babylonian Divinatory Texts Chiefly in the Schøyen Collection*, Cornell University Studies in Assyriology and Sumerology 18 = Manuscripts in the Schøyen Collection, Cuneiform Texts 7, with an appendix of material from the papers of W.G. Lambert. Bethesda, MD: CDL Press.
- Glassner, J.J. 1991. Les textes de Haft Tépé, la Susiane et l’Elam au 2ème millenaire, avec la collaboration de F. Grillot. In: *Mésopotamie et Elam: actes de la XXXVIème Rencontre assyriologique internationale Gand, 10–14 juillet 1989*. Ghent: University of Ghent, 109–126. Gorris, E. 2013. Remarques sur la Lettre ninivite quatorze (BM 83–81–18, 307) en langue élamite. *Le Muséon* 126: 8–16 and Pl. 5.
- Grillot-Susini, F. 1987. *Éléments de grammaire élamite*, Synthèse 29, avec la collaboration de C. Roche. Paris: Éditions Recherche sur les Civilisations.
- Hakemi, A. 1997. *Shahdad, Archaeological Excavations of a Bronze Age Center in Iran*. Roma.
- Hallock, R.T. 1949. Two Elamite Texts of Syllabary A. *Journal of Near Eastern Studies* 8/4: 356–358.
- . 1969. *Persepolis Fortification Tablets*, Oriental Institute Publications 92. Chicago, IL: The University of Chicago Press.
- Harper, P.O., Aruz, J. and Tallon, F. 1992. *The Royal City of Susa. Ancient Near Eastern Treasures in the Louvre*. New York: The Metropolitan Museum of Art.
- Hartner, W. 1985. Old Iranian Calendars. In: *The Cambridge History of Iran*, vol. 2. Cambridge, 714–792.

- Hasselbach, R. 2005. *Sargonic Akkadian. A Historical and Comparative Study of the Syllabic Texts*. Wiesbaden: Harrassowitz Verlag.
- Hemmy, A.S. 1938. Relation to Egyptian and Susian Weights. In: Mackay, J.H. (ed.) *Further Excavations at Mohenjo-Daro*. Delhi, 672–678.
- Henkelman, W.F.M. 2008. *The Other Gods who are. Studies in Elamite-Iranian Acculturation based on the Persepolis Fortification Texts*, Achaemenid History 14. Leiden: Nederlands Instituut voor het Nabije Oosten.
- Herrero, P. and Glassner, J.-J. 1991. Haft-Tépé: choix de textes II. *Iranica Antiqua* 26: 39–80.
- Hinz, W. 1967. Elams Vertrag mit Narām-Sîn von Akkade. *Zeitschrift für Assyriologie*, N.F. 24: 66–95.
- . 1986. Zu den elamischen Briefen aus Ninive. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta Historiae Elamicae. Mélanges offerts à M.-J. Steve*. Paris: Éditions Recherche sur les Civilisations, 227–234.
- Hinz, W. and Koch, H. 1987. *Elamisches Wörterbuch (in 2 Teilen)*, Archäologische Mitteilungen aus Iran, Ergänzungsband 17. Berlin: Dietrich Reimer.
- Høyrup, J. 2002. *Lengths, Widths, Surfaces. A Portrait of Old Babylonian Algebra and Its Kin*, Sources and Studies in the History of Mathematics and Physical Sciences. New York: Springer.
- Koch, H. 1993. Elamisches Gilgameš-Epos oder doch Verwaltungstäfelchen? *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 83: 219–236.
- König, F.W. 1965. *Die elamischen Königsinschriften*, Archiv für Orientforschung, Beiheft 16. Graz.
- Labat, R. 1965a. *Un calendrier babylonien des travaux des signes et des mois (séries Iqqur îpuš)*, Bibliothèque de l'École des Hautes Études, IV^e section (Sciences historiques et philologiques) 321. Paris: Librairie Honoré Champion, éditeur.
- . 1965b. Jeux numériques dans l'idéographie susienne. In: *Studies in Honor of Benno Landsberger on His Seventy-Fifth Birthday April 21, 1965*, Assyriological Studies 16. Chicago, IL: The University of Chicago Press.
- . 1974. *Textes littéraires de Suse*, Mémoires de la Délégation archéologique en Iran 57 = Mission de Susiane, Suse Ville royale 11, avec la collaboration de D.O. Edzard. Paris: Librairie orientaliste Paul Geuthner.
- Lackenbacher, S. 1998. Elam, vii. Non-Elamite Texts in Elam. In: Yarshater, E. (ed.) *Encyclopædia Iranica*, vol. VIII. Costa Mesa, CA: Mazda Publishers, 342–344.
- Lambert, M. 1970. Une inscription de Kutir-Nahunte. *Journal Asiatique* 258/3–4: 243–246.
- . 1974. Deux textes élamites du III^e millénaire. *Revue d'Assyriologie et d'Archéologie Orientale* 68: 3–14.
- . 1977. Deux textes élamites de la fin du septième siècle. *Journal Asiatique* 264: 221–225.
- Lambert, W.G. 1991. The Akkadianization of Susiana under the Sukkalmahs. In: *Mésopotamie et Elam: actes de la XXXVI^{ème} Rencontre assyriologique internationale Gand, 10–14 juillet 1989*. Ghent: University of Ghent, 53–57.
- Legrain, L. 1913. Tablettes de comptabilité, etc. de l'époque de la dynastie d'Agadé. In: Scheil, V., *Textes élamites-sémitiques. Cinquième Série*, Mémoires de la Mission archéologique en Susiane 14. Paris: Ernest Leroux, éditeur, 62–131, with an introduction by V. Scheil, "Tablettes de l'époque de la dynastie d'Agadé", p. 61.
- Lindner, T. 2015. Das Glottonym Elamisch bzw. Elamitisch. In: idem, *Exkurse zur Wissenschaftsgeschichte der Linguistik, Indogermanische Grammatik IV/1 = Komposition, Lieferung 4*. Heidelberg: Universitätsverlag WINTER, 276–297.
- Linssen, M.J.H. 2004. *The cults of Uruk and Babylon. The temple ritual texts as evidence for Hellenistic cult practice*, Cuneiform Monographs 25. Leiden – Boston: Brill – STYX.

- Livingstone, A. 2013. *Hemerologies of Assyrian and Babylonian Scholars*, Cornell University Studies in Assyriology and Sumerology 25. Bethesda, MD: CDL Press.
- Malayeri, M. 2013. Scribal Training in Old Babylonian Susa. In: De Graef and Tavernier 2013: 365–375.
- Malbran-Labat, F. 1995. *Les inscriptions royales de Suse. Briques de l'époque paléo-élamite à l'Empire néo-élamite*. Paris: Réunion des Musées Nationaux.
- . 1996. Akkadien, bilingues et bilinguisme en Élam et à Ougarit. In: Briquel-Chatonnet, F. (ed.) *Mosaïque de langues, mosaïque culturelle. Le bilinguisme dans le proche-Orient ancien. Actes de la Table-Ronde du 18 novembre 1995 organisée par l'URA 1062 "Etudes Sémitiques"*, Antiquités sémitiques 1. Paris: Jean Maisonneuve, 33–61.
- Marchesi, G. 2010. The Sumerian King List and the Early History of Mesopotamia. In: Biga, M.G. and Liverani, M. (eds.) *anaturni gimilli studi dedicati al Padre Werner R. Mayer, S.J. da amici e allievi*, Quaderni di Vicino Oriente 5. Roma: Università di Roma "La Sapienza", 231–248.
- Miller, B., Besenval, R. and Bourgarit, D. 2004. Early 'Lost-wax Casting' in Baluchistan (Pakistan): the 'Leopards Weight' from Shahi-Tump. In: Stöllner, T., Slotta, R. and Vatandoust, A. (eds.) *Persiens Antike Pracht*. Bochum, 274–281.
- Mofidi-Nasrabadi, B. 2011. The Grave of a *puhu-teppu* from Haft Tappeh. *Akkadica* 132: 151–161.
- . 2012. Arbeitszimmer eines Schreibers aus der mittelelamischen Zeit. In: Wilhelm, G. (ed.) *Organisation, Representation, and Symbols of Power in the Ancient Near East. Proceedings of the 54th Rencontre Assyriologique Internationale at Würzburg 20–25 July 2008*. Winona Lake, IN: Eisenbrauns, 747–756.
- . 2014. Vorbericht der archäologischen Ausgrabungen der Kampagnen 2012–2013 in Haft Tappeh (Iran). *Elamica* 4: 67–167.
- Negahban, E.O. 1990. The Haft Tepe Bronze Plaque. An Example of Middle Elamite Art. In: Vallat, F. (ed.) *Contribution à l'histoire de l'Iran. Mélanges offerts à Jean Perrot*. Paris: Éditions Recherche sur les Civilisations, 137–142.
- . 1991. *Excavations at Haft Tepe, Iran*, University Museum Monograph 70. Philadelphia: The University Museum of Archaeology and Anthropology, University of Pennsylvania.
- . 1994. The artist's workshop of Haft Tepe. In: Gasche, H., Tanret, M., Janssen, C. and Degraeve, A. (eds.) *Cinquante-deux réflexions sur le Proche-Orient ancien offertes en hommage à Léon De Meyer*, Mesopotamian History and Environment, Occasional Publications 2. Leuven: Peeters, 31–41.
- Neugebauer, O. and Sachs, A.J. 1945. *Mathematical Cuneiform Texts*, American Oriental Series 29, 3 vols. New Haven, CT: American Oriental Society.
- Nougayrol, J. 1972. Notes brèves, no. 12 (note to Labat 1965a: 259–260). *Revue d'Assyriologie et d'Archéologie Orientale* 66: 96.
- Paper, H.H. 1954. Note préliminaire sur la date de trois tablettes élamites de Suse. In: Ghirshman, R., *Village perse-achéménide*, Mémoires de la Mission archéologique en Iran 36. Paris: Presses universitaires de France, 79–82 and Pl. XXIV.
- Parker, R.A. and Dubberstein, W.H. 1956. *Babylonian Chronology, 626 B.C. – A.D. 75*. Providence, RI: Brown University Press.
- Parpola, S. 1993. *Letters from Assyrian and Babylonian Scholars*, State Archives of Assyria 10. Helsinki: Helsinki University Press.
- Piperno, M. and Salvatori, S. 2007. *The Shahr-i Sokhta Graveyard (Sistan, Iran). Excavations Campaigns 1972–1978*. Roma.
- Pittman, H. 2016. New Evidence for Interaction between the Iranian Plateau and the Indus Valley: Seals and Sealings from

- Konar Sandal South. In: Abraham, S.A., Gullapalli, P., Raczek, T.P. and Rizvi, U.Z. (eds.) *Connections and Complexity: New Approaches to the Archaeology of South Asia*. New York, 63–89.
- Potts, D.T. 1999. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*. Cambridge: Cambridge University Press (2nd edition: 2016).
- . 2012. The Elamites. In: Daryaei, T. (ed.) *The Oxford Handbook of Iranian History*. Oxford: Oxford University Press, 37–56.
- Radner, K. and Robson, E. 2011. *The Oxford Handbook of Cuneiform Culture*. Oxford – New York: Oxford University Press.
- Reade, J. 1992. The Elamite Tablets from Niniveh. *Nouvelles Assyriologiques brèves et utilitaires* 1992/119.
- . 2000. Elam after the Assyrian sack of Susa in 647 BC. *Nouvelles Assyriologiques brèves et utilitaires* 2000/80.
- Reiner, E. 1969. The Elamite Language. In: *Altkleinasiatische Sprachen*, Handbuch der Orientalistik, I. Abt., 2. Band, 1. und 2. Abschnitt, Lieferung 2. Leiden – Köln: E.J. Brill, 54–118.
- . 1973. Inscription from a Royal Elamite Tomb. *Archiv für Orientforschung* 24: 87–102.
- . 1998. Celestial Omen Tablets and Fragments in the British Museum. In: Maul, S.M. (ed.) *Festschrift für Rykle Borger zu seinem 65. Geburtstag am 24. Mai 1994. tikip santakki mala bašmu*, Cuneiform Monographs 10. Groningen: STYX Publications, 215–302.
- Rezayi-Sadr, H. 2015. Ein neu-elamischer Brief geschrieben auf einem Keramikfragment gefunden in Marbacheh bei Ramhormoz (Iran). *Elamica* 5: 53–57.
- Robson, E. 1999. *Mesopotamian mathematics, 2100–1600 BC: technical constants in bureaucracy and education*, Oxford Editions of Cuneiform Texts 14. Oxford: Clarendon.
- . 2008. *Mathematics in Ancient Iraq. A Social History*. Princeton – Oxford: Princeton University Press.
- Rochberg-Halton, F. 1988. *Aspects of Babylonian Celestial Divination. The lunar eclipse tablets of Enūma Anu Enlil*, Archiv für Orientforschung, Beiheft 22). Horn, Austria: Ferdinand Berger & Söhne.
- Romagnuolo, C. 2012. *hutta-* and *kuši-* in Achaemenid Elamite. In: Basello, G.P. and Rossi, A.V. (eds.) *DARIOSH Studies II. Persepolis and Its Settlements: Territorial System and Ideology in the Achaemenid State*, Series Minor 78. Napoli: Università degli Studi di Napoli “L’Orientale”, 184–195.
- Rossi-Osmida, G. 2002. *Margiana. Gonur-depe Necropolis*. Venezia.
- Rutz, M.T. 2006. Textual Transmission between Babylonia and Susa: A New Solar Omen Compendium. *Journal of Cuneiform Studies* 58: 63–96.
- . 2013. *Bodies of Knowledge in Ancient Mesopotamia. The Diviners of Late Bronze Age Emar and Their Tablet Collection*, Ancient Magic and Divination 9. Leiden – Boston: Brill.
- Scheil, V. 1902. *Textes élamites-sémitiques. Deuxième série*, Délégation en Perse, Mémoires 4. Paris: Ernest Leroux, éditeur.
- . 1907. *Textes élamites-anzanites. Troisième série*, Délégation en Perse, Mémoires 9, figures des originaux par J.E. Gautier. Paris: Ernest Leroux, éditeur.
- . 1911. *Textes élamites-anzanites. Quatrième série*, Délégation en Perse, Mémoires 11. Paris: Ernest Leroux, éditeur.
- . 1915. Notules. IX. Les idéogrammes chiffrés de *šarru*: et. *Revue d’Assyriologie et d’Archéologie Orientale* 12: 158–160.
- . 1917a. Déchiffrement d’un document anzanite relatif aux présages. *Revue d’Assyriologie et d’Archéologie Orientale* 14: 29–59.

- . 1917b. Un fragment susien du livre Enuma Anu (ilu) Ellil. In: *Notules. Revue d'Assyriologie et d'Archéologie Orientale* 14: 139–142.
- . 1925. Passim. *Revue d'Assyriologie et d'Archéologie Orientale* 22: 141–162.
- . 1927. Carptim. *Revue d'Assyriologie et d'Archéologie Orientale* 24: 31–48.
- . 1928. Sparsim. *Revue d'Assyriologie et d'Archéologie Orientale* 25: 37–49.
- . 1930. *Actes juridiques susiens*, Mémoires de la Mission Archéologique de Perse 22. Paris: Librairie Ernest Leroux.
- . 1932. *Actes juridiques susiens (Suite: n° 166 à n° 327)*, Mémoires de la mission archéologique de Perse 23. Paris: Librairie Ernest Leroux.
- . 1934. Listes susiennes des dynasties de Sumer-Accad. *Revue d'Assyriologie et d'Archéologie Orientale* 31/4: 149–166.
- . 1938. Tablettes susiennes. Exercices scolaires. Calcul des surfaces. *Revue d'Assyriologie et d'Archéologie Orientale* 35: 92–103.
- . 1939. *Mélanges épigraphiques*, Mémoires de la Mission Archéologique de Perse 28. Paris: Librairie Ernest Leroux.
- Schmidt, E.F. 1933. Tepe Hissar Excavations 1931. *The Museum Journal* 23: 323–483.
- . 1937. *Excavations at Tepe Hissar, Damghan*. Philadelphia, PA: University of Pennsylvania Press.
- Schmitt, R. 2003. *Meno-logium Bagistano-Persepolitenum. Studien zu den altpersischen Monatsnamen und ihren elamischen Wiedergaben*, Veröffentlichungen zur Iranistik 30 = Österreichische Akademie der Wissenschaften, philosophisch-historische Klasse, Sitzungsberichte 705. Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- . 2006. Zu den altpersischen Monatsnamen und ihren elamischen Wiedergaben. In: Panaino, A. and Piras, A. (eds.) *Proceedings of the 5th Conference of the Societas Iranologica Europæa held in Ravenna, 6–11 October 2003*, vol. I: *Ancient & Middle Iranian Studies*. Milano: Mimesis, 201–213.
- Sollberger, E. 1965. A New Inscription of Šilhak-Inšušinak. *Journal of Cuneiform Studies* 19: 31–32.
- Soutzo, M.C. 1911. Etudes des monuments pondéraux de Souse. *Mémoires de la Délégation en Perse* 12: 1–50.
- Stein, A. 1937. *Archaeological Reconnaissances in North-Western India and South-Eastern Iran*. London.
- Steve, M.-J. 1967. *Tchoga Zanbil (Dur Untash) III. Textes élamites et accadiens de Tchoga Zanbil*, Mémoires de la Délégation archéologique en Iran 41. Paris: Librairie orientale Paul Geuthner.
- Steve, M.-J., Gasche, H. and De Meyer, L. 1980. La Susiane au deuxième millénaire: à propos d'une interprétation des fouilles de Suse. *Iranica Antiqua* 15: 49–154 and Pls. I–VI.
- Stock, B. 1990. *Listening for the Text: On the Uses of the Past*. Baltimore, MD: Johns Hopkins University Press.
- Stolper, M.W. 1976. Preliminary Report on Texts from Tāl-e Malyān 1971–1974. In: Bagherzadeh, F. (ed.) *Proceedings of the IVth Annual Symposium on Archaeological Research in Iran. 3rd – 8th November 1975*. Tehran: Iranian Centre for Archaeological Research, 89–100 and 108–109, Photos 1–3.
- . 1982. On the Dynasty of Šimaški and the Early Sukkalmahš. *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 72: 42–67.
- . 1984. *Texts from Tall-i Malyan I. Elamite Administrative Texts (1972–1974)*, Occasional Publications of the Babylonian Fund 6. Philadelphia: Babylonian Fund of the University Museum.
- Tanret, M. 1986. Fragments de tablettes pour des fragments d'histoire. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta Historiae Elamicae. Mélanges offerts à M.-J. Steve*. Paris: Éditions Recherche sur les Civilisations, 139–150.

- Tanret, M. and De Graef, K. 2010. The Exercise Tablets from Chantier B in Susa revisited. *Iranica Antiqua* 45: 225–257.
- Tavernier, J. 2010. Migration des savoirs entre l'Élam et la Mésopotamie. *Res Antiquae* 7: 199–222.
- . 2011. Élamite. Analyse grammaticale et lecture de textes. *Res Antiquae* 8: 315–350.
- . 2013. Elamite and Old Iranian Afterlife Concepts. In: De Graef and Tavernier 2013: 471–89.
- . 2016. Two Toponyms with Abrupt Spellings in Middle Elamite Inscriptions. *Res Antiquae* 13: 281–284.
- Taylor, J. 2011. Tablets as Artefacts, Scribes as Artisans. In: Radner and Robson 2011: 5–31.
- Turri, L. 2015. The Ponderal Systems of Qatna. In: Archi, A. (ed.) *Tradition and Innovation in the Ancient Near East, Proceedings of the 57th Rencontre Assyriologique Internationale at Rome, 4–8 July 2001*. Rome: 471–480.
- Vallat, F. 1974. L'inscription trilingue de Xerxes à la porte de Darius. *Cahiers de la Délégation Archéologique Française en Iran* 4: 171–180; p. 215, Figure 31; p. 253, Pl. 37; p. 256, Pl. 40.
- . 1988. A propos de l'origine des tablettes élamites dites “de Ninive” conservées au British Museum. *Nouvelles Assyriologiques brèves et utilitaires* 1988/39: 26–27.
- . 1995. Épopée de Gilgamesh ou tablette économique de Persersépolis [sic!]? Ni l'un, ni l'autre! *Nouvelles Assyriologiques brèves et utilitaires* 1995/46: 39.
- . 1997. La lettre élamite d'Arménie. *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 87: 258–270.
- . 1998a. Elam, i. The History of Elam. In: Yarshater, E. (ed.) *Encyclopædia Iranica*, vol. VIII. Costa Mesa, CA: Mazda Publishers, 301–313.
- . 1998b. Le royaume élamite de Zamin et les “Lettres de Ninive”. *Iranica Antiqua* 33: 95–106.
- Van der Meer, P.E. 1935. *Textes scolaires de Suse*, Mémoires de la Mission archéologique de Perse 28. Paris: Librairie Ernest Leroux.
- Van Dijk, J., Goetze, A. and Hussey, M.I. 1985. *Early Mesopotamian Incantations and Rituals*, Yale Oriental Series, Babylonian Texts 11. New Haven, CT – London: Yale University Press.
- Virolleaud, C. 1908. *L'Astrologie Chaldéenne. Le Livre intitulé “enuma (Anu)^{ilu} Bêl”*. Texte cunéiforme, Sin. Paris: Librairie Paul Geuthner.
- Von Soden, W. 1964. Review of Bruins and Rutten 1961. *Bibliotheca Orientalis* 21/1–2: 44–50.
- Walker, C.B.F. 1980. Elamite Inscriptions in the British Museum. *Iran* 18: 75–81.
- Weissbach, F.H. 1902. Susische Thontäfelchen. *Beiträge zur Assyriologie* 4: 168–201.
- Zaccagnini, C. 1999–2001. The Mina of Karkemish and Other Minas. *State Archives of Assyria Bulletin* 13: 39–56.
- Zadok, R. 1984. *The Elamite Onomasticon*, Supplemento agli Annali dell'Istituto Universitario Orientale 40. Napoli: Istituto Universitario Orientale.
- . 1994. Elamites and Other Peoples from Iran and the Persian Gulf Region in Early Mesopotamian Sources. *Iran* 32: 31–51.
- . 2011. The Babylonia – Elam Connections in the Chaldaean and Achaemenid Periods (Part One). *Tel Aviv* 38: 120–143.

CHAPTER THIRTY-FIVE

Elamite religion and ritual



Enrique Quintana

Introduction

In treating the religion and ritual of “the Elamite world”, one must bear in mind that Elam evolved throughout its three thousand or so years of existence under numerous rulers and dynasties who inhabited a common territory combining highland and lowland geographical environments. As a result, the character of Elamite religion was highly dynamic. The present general survey commences with the 3rd millennium BC, when textual documentation first becomes available with the records of the Akkadian kings and the Awanite king Puzur-Inshushinak, and is brought to a close with the emergence of the Achaemenid empire. Despite the scope of reigns and epochs covered here, and the corresponding diversity of “religions” and divinities, it is evident that on the whole Elamite religious beliefs and practices display an unexpected continuity throughout the millennia.

Divinities

It would seem that in Elam there was never a unified religious creed. Instead, with a territory constituted by various geopolitical and regional entities, a diverse set of divinities, each closely linked to its place of origin, is encountered. Some of these deities were represented in iconography on seals, stelae, rock reliefs and as statues and figurines. They can usually be identified by their headdress with horns, and are often found seated on a throne of coiled snakes with a human head.

From Sumerian, Akkadian and Elamite texts it can be established that in the Susiana alone, over 200 divinities were worshipped (Vallat 1998), including most notably Inshushinak, Ishnikarab, Lagamal and Manzat as well as the Mesopotamian Inanna, Ea, Sin and Adad. From Awan were the gods Pinikir, Humban, Hutran and Nahhunte and Kirmashir; from Anshan were Napirisha, Kiririsha, Simut, Kilah-shupir, Silirqatru and Upurkupak; from Shimashki was Ruhurater and Hishmitik, and perhaps Yabru; and from Ayapir near modern Izeh-Malamir

was Mashti. This heterogeneous ensemble is partly mentioned in a royal inscription of the Middle Elamite king Shilhak-Inshushinak (EKI 54), who invokes “the gods of Elam, the gods of Anshan and the gods of Susa” as separate, fundamentally distinct, pantheons of divinities. In the Neo-Elamite period “the gods of Ayapir” (EKI 75 §26) are also included. At the head of the pantheon may have been the god Yabru (Elamite Yabr or Yabar), not attested in Elamite sources but equated by the Mesopotamians to Sumerian Anu, the supreme god (*Šurpu* C:53). This divinity appears in the royal name Yabrat/Yabarat (later Ebarat, Eparti), not strictly Elamite, but of Shimashkian origin, (as Ebarat appears two times in the famous Susian list of Simashkian kings).

One god who remained consistently important throughout Elamite history was Inshushinak, the lord of Susa and supreme lord of the dead, responsible for justice and law. Otherwise, two main trends in the Elamite pantheon can be observed: the honouring in the Old Elamite period of Suso-Mesopotamian gods at Susa and, from the Middle Elamite period onwards, the predominance of gods from the highlands, most notably the divine couple of Napirisha, the great god, and his wife Kiririsha, the great goddess, also known by the epithets Lady of Liyan, Mother of the Gods, Guardian of the Kings and Lady of Death.

In addition to these major deities, groups of gods were allocated specific responsibilities. For example, the Bahahutep (benefactors or protectors) were creators of the world and life, while the Napratep (constructors or designers) were responsible for organizing, protecting and acting upon the physical realm of the world. There were also gods or goddesses associated with celestial objects, specific physical elements and moral notions. Thus, Humban was Commander of Heaven, the god of the element air; Nahhunte was an astral divinity associated with the sun; and Napir with the Moon.

Divine couples are also known: Shimut, the messenger of the gods, and Manzat, his female companion; the god Ruhurater, creator of human beings, and Hishmitik, the goddess who assigns their names. This latter pair was present during childbirth. Ruhurater created the human form – the physical body – and Hishmitik conferred a name upon the newborn; for, as the Sumerians believed, human beings (and things) did not exist until they were named. This close relationship between the divine and the individual’s name was often expressed in personal names incorporating the name of a divinity; for instance: Untash-Napirisha, “Napirisha helped me”; Shilhak-Inshushinak, “strengthened by Inshushinak”, or Melir-Nahhunte “(female) servant of Nahhunte”.

One of the main roles of the gods was to give life. They possessed a numinous essence known as *kiden*, which they placed over humans for their protection. Another major responsibility of the gods was to confer and protect kingship, subduing the kings’ enemies and ensuring a prosperous and happy reign. Kings also had their own personal gods to protect their place on the throne from potential usurpers who might claim to have been elected by the gods. Activities such as law giving and trade regulation, amongst many others, came under the

jurisdiction of various deities.

Sickness, poverty and other misfortunes to befall human beings were the domain of demons and ghosts, whose expulsion required the skills of an exorcist. That the Elamites believed in some kind of life after death can be deduced from rites of purification, the content of maledictions and the offerings placed in the burials. It has been argued that the death was a primary preoccupation of Elamites and that their ziggurats had a funerary character (Vallat 1997). A unique group of seven texts of funerary character found in a tomb at Susa dating to the end of the Sukkalmah period offer an important, if difficult interpret, reference for afterlife beliefs in Elam. According to these tablets, after death an individual embarked on a journey accompanied by the gods Ishnikarab and Lagamal. At its conclusion they faced some kind of a weighing and a judgement was handed down by Inshushinak. The texts indicate that the afterlife was a place of darkness, misery and adversity; a land of privation and thirst without food or water (Scheil 1916; Steve and Gasche 1996; Tavernier 2013).

Temples

The Elamite gods were worshipped in temples and open-air sanctuaries (see below). Our knowledge of early Elamite temples is derived from 3rd millennium cylinder seals on which they are represented as monumental rectangular buildings set on a terrace foundation with facades marked by recesses and false niches. In the Middle Elamite period, an important religious centre was built by the king Untash-Napirisha (ca. 1340–1300) at Chogha Zanbil. Some of its temples are mentioned in texts by name: *hunin*, *kinin*, *likrin*, *limin*, *silin*, *talin*, *mielki ilani*, but their meaning remains unknown.

Divinities in the form of sculptures resided inside sanctuaries and were nurtured by priests and priestesses. Statues of the king and members of the royal family were also placed in the sanctuary to worship the gods and receive their blessing and protection, as were stelae narrating the achievements of the king. Offerings were made at the temples by kings, potentates and the general populace, with figurines of worshippers perhaps placed in the sanctuary to pray before the god after a donation to the priests. Weapons such as swords, axes and arrows were dedicated to the divinities in order to ensure the kings' military victories.

The grounds of the temples dedicated to the principal gods such as Inshushinak, Napirisha and Kiririsha included sacred groves, which are presumed to have possessed a funerary character. The groves were described in texts as secret places surrounded by a wall with an entrance door and it is believed that the Elamite kings and nobles were buried inside. Such a grove may be represented in a depiction of gardens from either Susa or Madaktu preserved in a Neo-Assyrian relief of the North Palace of Ashurbanipal at Nineveh (Barnett 1976: Pls. XXV and XXVI, slab 9).

A question of interest for the history of religion is whether the Elamites had a divinity

associated with fire and practiced the cult of fire. In Middle Elamite Susa some kind of fire cult might be surmised from the imagery depicted on a group of seals (Amiet 1966, no. 275; MDP 1972, numbers 2076–7, 2081). A text from the Kidinuid dynasty bears invocations to Gibil (MDP 18, 255), a Mesopotamian fire deity. At Chogha Zanbil a *siyan limin* (temple of the fire) was dedicated to Kilahshupir (MDP 41, 29) and another to Nusku (MDP 41, 23–24); both fire deities. In the Neo-Elamite period a stand with fire is seen on the rock-relief of Hanni from Kul-e Farah (see below; open-air sanctuaries) and a certain Tallak-kutur, priest of fire, is mentioned in texts (Vallat 2003). This evidence indicates the use of fire in cultic rituals and divinities associated with fire, perhaps suggesting the existence of a fire cult in Elam.

Both the sacred city of Chogha Zanbil and the Acropolis mound of Susa can be considered to have hosted large religious compounds incorporating numerous temples surrounded by enclosure walls. In the centre dominating the sacred precinct was the temple tower of several stories: the ziggurat (*zagratume* in Elamite), a stepped tower ornamented with enormous horns. At Chogha Zanbil, the corners of the ziggurat dedicated to Napirisha and Inshushinak are precisely oriented to the cardinal points. The façades of the temples were decorated with protective geniuses and mythical animals. Griffins, eagle-lion hybrids of Elamite origin, were placed at the base of the ziggurat to protect the entrance.

Open-air sanctuaries

Dramatic natural outdoor spaces provided important locations for the worshipping of deities. The Elamite open-air sanctuaries discovered close to water courses at Kurangun, Kul-e Farah and Shekaft-e Salman in the Zagros valleys of southwest Iran, all incorporate rock-carved reliefs of religious significance enhancing the numinous dimensions of their natural landscape. These sanctuaries were places of pilgrimage where festivities, perhaps linked to seasonal movements of herding groups, may have been celebrated on an annual basis (e.g. the autumnal equinox) (Henkelman 2008: 59). During the festivities at these sites, prayers requesting the protection of the gods are likely to have been recited.

The Kurangun relief was carved on the side of a mountain overlooking the valley of the Fahliyan River, some 90 km northwest of Tall-e Malyan (the ancient city of Anshan), between Susa and Persepolis. It depicts a divine couple, identified as deities by their horned crowns, perhaps the “Great God” Napirisha and the “Supreme Goddess” Kiririsha. Napirisha is seated on a coiled serpent throne and holds a two-headed snake in his left hand. Kiririsha sits on an animal-shaped throne. These deities are being worshipped by several male and female devotees. The divinities are faced by a couple standing behind a man with outstretched hands who catches streams flowing from the ring and staff held in Napirisha’s right hand. In a later period, a group of worshippers with long plaited hair descending a set of stairs were added the left of the central scene and another small group of worshippers to its right (Potts 2004;

Álvarez-Mon 2014).

In the Izeh-Malamir valley, about 120 km southeast of Susa and 300 km northwest of Tall-e Malyan, is situated the sanctuary of Kul-e Farah, where six separate reliefs dating to the Neo-Elamite period were carved on the faces of cliffs and boulders. In the relief labelled Kul-e Farah 1, an individual identified in the accompanying inscription (EKI 75) as Hanni, ruler Aiapir, is shown overseeing the sacrifice of animals with his court officials, officiators and musicians who are all named by captions. The long inscription is dedicated to Tirutur, the god of Shilhite, and mentions the names of Hanni, his wife, his children, his seneschal, his officiator and priests. In it, Hanni requests magical protection for his image followed by a set of curses against anyone who would vandalize it. The celebrations and rituals that took place at this site evidently involved a shared sacrificial meal, as shown in Kul-e Farah IV (Álvarez-Mon 2013).

At Shekaft-e Salman, on the other side of the Izeh valley, is a cave sanctuary with a spring and waterfall incorporating four carved-relief panels. One panel dating to the late Middle Elamite period shows three adults and one child oriented towards the cave, making gestures of prayer before a fire stand. Hanni later co-opted this ancestral royal imagery by adding his own inscription (EKI 76c-d). A second late Middle Elamite panel shows the figures of a man, woman and child, likewise making gestures of prayer towards the cave. The latter two preserved captions (EKI 76g-i), added later by Hanni to identify them as members of his family. Hanni also added an inscription on a third relief (EKI 76 and 76a) depicting a single individual in prayer. In this inscription Hanni asks for the protection of the goddess Mashti of Tarrisha, the ancient name of Shekaft-e Salman, and finishes with the habitual curses. An extremely damaged fourth panel depicting a praying individual also bears an inscription of Hanni mentioning the goddess Mashti (EKI 76f).

Finally, the sanctuary at Naqsh-e Rostam located 6km northeast of Persepolis, notably chosen as the burial site of several Achaemenid kings, includes the poorly preserved remains of an Elamite relief. The central panel features two gods seated on coiled-serpent thrones and two worshippers (one wearing a crown) framing the pair of enthroned deities were added at a later date.

Clergy

Priests, priestesses and acolytes are well attested in the Elamite world, although their specific functions remain basically unknown. The content of certain Neo-Elamite royal texts of the king Tepti-Huban-Inshushinak (EKI 85) and of the so-called Oruru bronze plaque allows us to assume that there was equality between priestesses and priests, as both administer temples, divine estates and the gods' assets; in addition, it is particularly stated that they got married and bore children ("flour and sheep handed over to the chief priestess and her children"; author's own translation). In the other mentioned text (EKI 85) appears an unnamed chief

priestess for the temple of Humban, a main god.

Some clergy are known by name in the Neo-Elamite period. For example, a chief priest of all temples (Shutruru) who accompanied the ruler on his travels and war campaigns (EKI 74). In glyptic imagery and the *Sit samši* bronze model (described below) male priests perform divine rites fully naked (Tallon in Harper et al. 1992: 137–140, no. 87). They are instead sometimes represented with long hair or wearing a wig.

Making appeals to the gods

Invocations to the gods are well known through three different categories of evidence: royal inscriptions, legal documentation and curses.

Royal inscriptions

The Middle Elamite kings Untash-Napirisha and Shilhak-Inshushinak I (ca.1150–1120) were particularly active in seeking the favour of the gods in their royal inscriptions. The god is invoked by their name, usually followed by his or her epithets and powers, and the king's name is mentioned together with his filiation and titles. Shilhak-Inshushinak I, for example, cites certain family members with explanatory adjectives such as “beloved brother” (*igi hanik*), “older brother” (*igi hamit*), or “genuine mother” (*amma haštuk*). This same king makes his invocations before the destruction of the cities he ravages in his raids (e.g. EKI 48 and 54). Such invocations are followed by sacrifices and offerings. The king Untash-Napirisha built temples to the gods in exchange for their divine favour and protection. The renovation of buildings, ritual offerings or the recovering and keeping of royal steles were accomplished under the god's orders (e.g. EKI 21).

In the Middle Elamite period, a list of appeals for divine benevolence can be established as follows: “for the king's life”, “for his life and the life of his family”, “to obtain divine favour”, “for his life and reign”, “for his life, health and reign”, “for his life, reign, and seed”, “for a long life and reign”, “for a long life”, “for the reign”, “for the accomplishment of divine commands in order to recuperate ancient rites”, “in favour, honour, or recognition of the king”, “for his life, family, and the Elamite people”, “for his life, the life of his wife, and the Elamite people” and “for the life of the Elamite people” (Malbran-Labat 1995: 62–78, 88–116). It is noteworthy that the Elamite king included his subjects or citizens, the Elamite people or more precisely the inhabitants of Anshan and Susa, in the invocations (EKI 48, 53, 54)

A later inscription of the Neo-Elamite king Hallutash-Inshushinak addresses his god (IRS 58): “O! Inshushinak my god, do not bring me a difficult destiny, bring life, the one who is faithful, do not bring him the status of impiety!”

Legal documentation

Legal texts from Susa dating to the early 2nd millennium reveal that civil law and religion were intimately connected. The god Nahhunte, for example, appears in contracts as a partner of merchants, who in turn dedicated part of their profits to him. Such contracts were formalized in the presence of the city gods in their sanctuary. At Susa, they concluded with the oath involving the *sukkalmah*, the *sukkal* and the city god Inshushinak. Penal clauses for infringement of a sworn oath included torture (mutilation) of the treaty-breaker, payments for reparation, and loss of property. Explicit religious malediction was also threatened, with a divine curse (“may he disappear!”) and the revocation of divine protection, which would result in the loss of peace and life. A practice of trial by water ordeal is attested in connection with adoptions and inheritances, with contract clauses indicating that whoever breaks the agreement should go into the water and the god Shazi will shatter his skull in the whirlpool. In the so-called texts of Huhur a reference is found suggesting a verdict was reached by ordeal through water (Klíma 1971).

Curses

Various curses against those who would denigrate the king’s accomplishments were added at the end of royal inscriptions. In the late 3rd millennium, king Puzur-Inshushinak’s curses follow a typical pattern: if someone dismisses his texts, disregards his decisions in matters of justice, or carries away his dedicated objects, may all the gods a) tear out his roots and remove his seeds; b) let him not have an heir and not have a progeny (FAOS 7: 321–338). In the 2nd millennium during the Igihalkid and Shutrukid dynasties curses are addressed against “the enemy forces”, “whoever shall attack in bad faith the buildings erected”, and “whoever destroys, pulls out, steals or carries away the dedicated object”. The list of desired punishments include: “may the wrath, punishment or terror of the god or gods fall upon the evil doer”, “may his offspring or seed not be prosperous or not be preserved”, “may his name disappear”, “may the god’s powers overcome him”, “may the gods disregard his labours”, “he shall not enjoy what he should obtain”, “he shall be separated from his acolytes”, “his people shall be disobedient to him”, “his fortune shall not be prosperous” and “he shall not be pleased in his wants” (e.g. EKI 9 III a-c, 13 A, 16, 44 a-b, 45, 48 b, 54 a, 54 b, 61 B-C, 73)). On some occasions the king pleads for another later king to restore the work and reinstate his name (e.g. EKI 9 III b)

In the 1st millennium, texts explicitly describe curses made against evil doers. Three examples in particular offer insights into the nature of such maledictions.

First is the inscription on the Oruru bronze plaque (translated by the author; for discussion of this plaque see Basello 2013): “The one who tramples this text..., who takes away its bronze..., who takes control of an acolyte and, when he shall be grown, alienates him or hits

him..., who steals the provisions, who mistreats his prisoners..., who makes off with the food and goods, who withdraws the grain from the granary, who takes away the stocks from the housekeeping..., who lets rot the seed stored in the granary..., who destroys the bronze tablet that I have made hung on my god, who carries away, damages, ruins, erases, breaks, misuses or wrecks the written tablet, who smash it or seize it, may the punishment of Napirisha ... and Siashum fall over him, evil doer, like a mace..., may his progeny be cut off..., may his name not be preserved in the world”.

Second is a text of Hanni, prince of Ayapir preserved at Shekaft-e Salman (EKI 76, §§32–38): “The one who damages my image, who erases my name and puts his own name over it, the one who steals the gifts of the minister, who removes his sacred offerings, that one will pursued to the furthest region by the curse of Humban, Kiririsha and the benevolent lord that created water and earth. The salvation of Mashti will be removed from him! May his life be cut off under the Moon and the Sun! (He will be without) descendants!”

Third is an inscription of a priest named Shutruru (EKI 74, §§17–18): “As for the one who will interchange an acolyte or take him away from the temple in order to hand him over to another one, may the punishment of Napirisha fall upon him, may Nahhunte wipe out his name.”

Ritual ceremonies

Most informative on the characteristics of religious rituals are the royal inscriptions dating to the Middle Elamite period. One text by the king Tepti-ahar from Haft-Tepe (IRS 20; see also Reiner 1973) indicates the existence of a ritual taking place in the evening and states that “the four wives of the building guards should not perform the *zilluhti* ceremony, should not remove the gold of the statues, their clothes should be tied with ribbons, after entering they must embrace the feet of the protective and intermediary divinities, they must ignite torches and watch. The *haša*, the *kiparu*, the chief priest, the guards of the house, and the priest of the house should seal the house in front of the women; at dawn after they have checked (the statue of the) king, the protective and intermediary divinities, they can exit and go”.

To the reign of the king Shilhak-Inshushinak I belongs the *Sit samši* (rising sun), a three-dimensional bronze model hidden in a tile incorporated into the masonry of a tomb situated in the area of the Ninhursag temple in Susa. The model bears a three-dimensional representation of a ritual offering by two naked priests surrounded by an offering table, a stele, an altar, a ziggurat-like model, trees (a grove?) and two basins. One priest stretches the palms of his hands out towards the other, who is about to pour some kind of liquid from a vessel. It is generally agreed that the scene may be depicting a ritual cleansing taking place at the sunrise. The object has an inscription on the base (EKI 56) belonging to the king Shilhak-Inshushinak I, which states: I am Shilhak-Inshushinak, son of Shutruk-Nahhunte, beloved servant of

Inshushinak, king of Anshan and Susa, enlarger of the realm, sovereign of Elam, ruler of Elam, a “rising of the sun” in bronze I made, s/he ... in/of Susa, as a gift may it come to you.

The inclusion of water in rituals must have been important, since at Chogha Zanbil two massive basins situated at the edge of the holy city’s compound may have been built in order to collect water for the performance of ablutions. The water may have been internally supplied by means of a network of drain pipes and canals linked to the ziggurat (see Mofidi-Nasrabadi 2007).

In the Neo-Elamite period the previously mentioned Oruru plaque conveys a ritual to the four winds performed with wine, flour and sheep.

Sacrifices, offerings and festivals

The oldest record of sacrifices and offerings is found in a document dating to the reign of king Puzur-Inshushinak. This text indicates that at the gate of the Inshushinak temple at Susa the daily sacrifice of two sheep took place; one at dawn and another in the evening. Singers were stationed day and night at this gate, which was greased with oil (20 sila = 20 litres). In addition, the king dedicated to Inshushinak an emblem of gold and silver, a dagger and an axe (Potts 2016: 113, table 4.12). In the 2nd millennium Shilhak-Inshushinak mentions that he made sacrifices and offerings after his reconstruction and repair of buildings and objects, but does not further describe or provide the name of these ritual offerings (EKI 46–53).

In the Neo-Elamite period it is recorded that the priest Shutruru made a gift of 12 sheep and 120 kg of flour as an offering for the goddess Lakamar (EKI 74 §58). The king Tepti-Huban-Inshushinak also donated to various temples for a festival a total of 31 bulls and 186 sheep, to be consumed by priests and clergymen at a rate of one bull and six sheep per temple (EKI 85). Imagery depicted in Neo-Elamite rock-reliefs reveals that sacrifices and offerings were made in open-air sanctuaries during religious ceremonies, perhaps centered on an image of the god, involving banqueting and music (Álvarez-Mon 2013).

In Achaemenid Persia, sacrificial rituals and offerings are attested in Elamite documents from the Persepolis archive. The *lan* ceremony, a regular sacrifice with Elamite precedents frequently cited in texts, included the provision of flour – for sacrificial bread – beer or wine, fruits and sheep. The *kušukum*, another sacrificial ritual, involved a sheep, large quantities of wine (10 litres), beer (10 litres) and cereal (100 kilograms). The *bašur* and *šumar*, both funerary offerings, also involved large amounts of foodstuffs (see Henkelman 2003).

Very little is known about the religious holidays of Elam, but royal involvement is consistently alluded to in the documentation. In the late 3rd millennium festivals are known to have taken place at Susa. One of these, referred to as *gušum*, was dedicated to “the Lady of the Acropolis”, perhaps Ninhursag or Inanna. According to Hinz (1971: 672; 1972: 60) it was celebrated annually on the occasion of the new moon of the autumnal equinox, or in the new

year (spring equinox) on “the day of the flowing offerings” when sheep were sacrificed inside the sacred temple grove. Another holiday known as *tuga* was devoted to Shimut. It took place in May during spring, and was accompanied by the sacrifice of a bull (Hinz 1971: 672, 1972: 60). During the Middle Elamite period a celebration in honour of the god Kirwasir was held during the new moon, as mentioned by the king Tepti-ahar’s stele from Haft Tepe (Reiner 1973).

Another festival mentioned in Middle and Neo-Elamite sources is the *šip*, the details of which can be expanded upon through evidence from Achaemenid times. It was dedicated to the god Zizkurra and commodities (flour, wine), livestock (sheep, calf), and poultry were consumed by perhaps up to 520 attendees in the open air. This holiday was held during November and December in the king’s presence and always in royal cities. On this occasion gifts were given and royal privileges granted by the king. Another holiday called *anši* was held between December and January and involved the distribution of a large amount of fruit, a commodity which may have had a special status (for both festivals, see Henkelman 2011).

Magic

Since it is generally difficult to separate magic and religion in ancient civilizations, the two must be conceived together in a very wide sense. Elamite manifestations of magic can be interrogated through a limited number of incantation, exorcism and astrological texts.

An incantation text partially written in Elamite and partially in Sumerian begins with an introductory “invocation” formula and closes with a Sumerian “én-é-nu-ru” (meaning unknown) formula, which is sometimes also placed as the text heading. Other texts are intended for the woman in the cradle (two texts); against the Lamashtu demon (two texts); for soothing a child; against the worm; against the ghosts; against the scorpion (BBVO I 1–7 and van Dijk 1957: 93).

Ritual incantations were formalized in Sumer with stereotyped formulas. Specific invocations to demons or evil-spirits were written in Elamite, because those demons were considered inhabitants of Elam; according to some Mesopotamian texts the witch-like and demoniac land (Hinz 1971: 662). An exorcism text (BBVO I 7, translated by the author) offers an example of this kind of magic: “*Enenuru*: may it purify, by the gods Enlil, Enki, Nergal, the heaven – repeated 7 times –, the earth – 7 times –, the hill – 7 times –, the sanctuary – 7 times –, I made an offering to Zinzi, I made an offering to Zihhi, I made an offering to Huh, Huh the one who lives, I made an offering to Huhme. The *Dimme*-demon, may he be conjured by the heaven’s life, by the earth’s life, until the spawn of his god be handed back to his place, may he not eat food with him, may he not drink water with him, in the feast, may Enlil your father not speak with your body.”

Elam was evidently considered by the Assyrians as a land where students learned and

practiced astrology, as we can surmise from Neo-Assyrian letters to the Assyrian king (e. g. SAA X 160). A unique astrological document dating to the Neo-Elamite period contains predictions of monthly events related to phenomena such as lunar eclipses and concludes with a curse. Both sides of the tablet are divided into sections, each of which provides predictions for a complete year, though it cannot be determined whether each section refers to the same year or deals with a different year. A singularity of the text is that on its reverse it bears the signature of its author, a man called Atekitin. As an example of the nature of these predictions, a passage of the third month reads: “(when the darkness shall cover the Moon, from the night coming) although the people have been enrolled, they will not protect the king from the tragedy”. The document in its final part reads as follows: “Tablet of Atekitin, son of Zuirru; he who shall damage it, he who shall write his name in the 70 omens that I have made, may he not be recognized under the sun” (Scheil 1917, subscription).

Later, in the Seleucid epoch, an incantation priest called Kidin-anu states that he found in Elam two astrological tablets that he copied and brought to Uruk in Mesopotamia (AO 6451; see Wiseman 1956).

Abbreviations

- BBVO I Incantation texts published in van Dijk, J.J. 1982. Fremdsprachliche Beschwörungstexte in der südmesopotamischen literarischen Ueberlieferung. In: Nissen, H.J. & Renger, J. (eds.) *Mesopotamien und seine Nachbarn: politische und kulturelle Wechselbeziehungen im alten Vorderasien vom 4. bis 1. Jahrtausend v. Chr.* 25. Berliner Beiträge zum Vorderen Orient 1. Berlin: Dietrich Reimer Verlag, 97–110.
- EKI Elamite royal inscriptions published in König, F.W. 1965. *Die Elamischen Königsinschriften*, Archiv für Orientforschung Beiheft 16). Graz (reprint Osnabrück, 1977).
- FAOS 7 Freiburger Altorientalische Studien published in Gelb, I.J.-Kienast, B. 1990. *Die Alakkadischen Königsinschriften des Dritten Jahrtausends v. Chr.* Stuttgart: Franz Steiner Verlag.
- IRS Royal inscriptions on bricks from Susa (and Chogha Zanbil) published in Malbran-Labat 1995.
- MDP 18 Sumerian and Akkadian texts published in Dossin, G. 1927. *Autres textes sumériens et accadiens*, Mémoires de la Mission Archéologique de Perse 18. Paris: Ernest Leroux.
- MDP 41 Royal inscriptions in Elamite and Akkadian from Chogha Zanbil published in Steve, M.-J. 1967. *Tchoga Zanbil (Dur-Untash), vol. III, Textes élamites et accadiens de Tchoga Zanbil*, Mémoires de la Délégation Archéologique en Iran 41. Paris:

Librairie Orientaliste Paul Geuthner.

- MDP Cachets, Sceaux-cylindres et Empreintes antiques in Amiet, P. 1972. *Glyptique*
43 *Susienne, vol. I, Textes, vol. II, Planches*, Mémoires de la Délégation Archéologique
en Iran 43. Paris: Librairie Orientaliste Paul Geuthner.
- SAA State Archives of Assyria volume X published in Parpola, S. 1993. *Letters from*
X *Assyrian and Babylonian Scholars*. Helsinki: Helsinki University Press.

Bibliography

- Álvarez-Mon, J. 2013. Braids of Glory, Elamite Sculptural Reliefs from the Highlands: Kul-e Farah IV. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University. December 14–17, 2009*, Mémoires de la Délégation en Perse 58. Leiden: Brill, 207–248.
- . 2014. Aesthetics of the Natural Environment in the Ancient Near East: the Elamite Rock-cut Sanctuary of Kurangun. In: Feldman, M. and Brown, B. (eds.) *Critical Approaches to Ancient Near Eastern Art*. Berlin: De Gruyter, 741–771.
- Amiet, P. 1966. Elam. Auvers-sur-Oise: Archée éditeur.
- Barnett, R.D. 1976. *Sculptures from the North Palace of Ashurbanipal at Nineveh (668–627 B.C.)*. London.
- Basello, G.P. 2013. The Pseudo-Sealing of the Persepolis Bronze Plaque. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University. December 14–17, 2009*, Mémoires de la Délégation en Perse 58. Leiden: Brill, 249–264.
- Harper, P.O., Aruz, J. and Tallon, F. (eds.) 1992. *The Royal City of Susa. Ancient Near Eastern Treasures in the Louvre*. New York (also in a French edition revised by A. Caubet: *La cité royale de Suse*. Paris, 1994).
- Henkelman, W. 2003. An Elamite memorial: The Šumar of Cambyse and Hystaspes. In: Henkelman, W. and Kuhrt, A. (eds.) *A Persian Perspective. Essays in Memory of Heleen Sancisi-Weerdenburg*, Achaemenid History 13. Leiden: Nederlands Instituut voor het Nabije Oosten, 101–172.
- . 2008. *The Other Gods Who Are, Studies in Elamite Iranian Acculturation based on the Persepolis Fortification Texts*. Leiden.
- . 2011. Parnakka's feast: *šip* in Pārsa and Elam. In: Alvarez Mon, J. and Garrison, M.B. (ed.) *Elam and Persia*, Winona Lake, IN: Eisenbrauns, 89–166.
- Hinz, W. 1971. Religion in ancient Elam. In: *Cambridge Ancient History (CAH) I/2*, chapter XXIII, Persia c. 2400–1800 B.C. Cambridge: Cambridge University Press, 662–673.
- . 1972. *The Lost World of Elam*. London: Sidgwick and Jackson.
- Klíma, J. 1971. Das Wasserordal in Elam. Nach den akkadischen Urkunden aus Susa und Huhur (Malamir). *Archiv Orientalní* 39: 401–424.
- Malbran-Labat, F. 1995. *Les Inscriptions Royales de Suse, Briques de l'époque paléo-élamite à l'Empire néo-élamite*. Paris: Réunion des Musées Nationaux.
- Mofidi-Nasrabadi, B. 2007. *Archäologische Ausgrabungen und Untersuchungen in Čogā Zanbil*. Münster: Agenda-Verlag.

- Potts, D.T. 2004. The Numinous and the Immanent. Some Thoughts on Kūrangūn and the Rudkhaneh-e Fahliyān. In: von Folsach, K., Thrane, H. and Thuesen, I. (eds.) *From Handaxe to Khan. Essays Presented to Peder Mortensen on the Occasion of his 70th Birthday*. Aarhus: Aarhus University Press, 143–156.
- . 2016. *The Archaeology of Elam*. Cambridge University Press: Cambridge, 2nd edition.
- Reiner, E. 1973. Inscription from a Royal Elamite tomb. *Archiv für Orientforschung* 24: 87–102.
- Scheil, V. 1916. Textes funéraires. *Revue d'assyriologie et d'archéologie orientale* 13: 165–174.
- . 1917. Déchiffrement d'un document anzanite relatif aux présages. *Revue d'Assyriologie et d'Archéologie Orientale* 14: 29–59.
- Steve, M.-J. and Gasche, H. 1996. L'accès à l'Au-delà, à Suse. In: Gasche, H. and Hrouda, B. (eds.) *Collectanea Orientalia. Histoire, arts de l'espace et industrie de la terre. Études offertes en hommage à Agnès Spycket*, Civilisations du Proche-Orient, Serie I, Archéologie et environnement 3). Neuchâtel – Paris: *Recherches et Publications*, 329–348.
- Tavernier, J. 2013. Elamite and Old Iranian Afterlife Concepts. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives*. Proceedings of the International Congress Held at Ghent University. December 14 – 17, 2009, Mémoires de la Délégation en Perse 58. Leiden: Brill, 471–489.
- Vallat, F. 1997. Le caractère funéraire de la *ziggurat* en Élam. *Nouvelles Assyriologiques Brèves et Utilitaires* 1997/38: 36–37.
- . 1998. Elamite Religion. In: Yarshater, E. (ed.) *Encyclopaedia Iranica*, 8. Costa Mesa, CA: Mazda Publishers, 335–342.
- . 2003. Un prêtre du feu à l'époque néo-élamite. *Akkadica* 124: 231–233.
- van Dijk, J. 1957. Textes divers du musée de Bagdad II. *Sumer* 13: 65–133.
- Wiseman, D.J. 1956. *Chronicles of Chaldean Kings (626–556 B. C.) in the British Museum*. London: Trustees of the British Museum.

Further Reading

- Bottéro, J. 1997. Les inscriptions cunéiformes funéraires. In: Gnoli, G. and Vernant, J.-P. (eds.) *La mort, les morts dans les sociétés anciennes, Actes du Colloque sur l'idéologie funéraire, Ischia, Cambridge, 1977*. Paris, 373–406.
- Ghirshman, R. 1968. *Tchoga Zanbil (Dur Untash) II: Temenos, Temples, Palais, Tombes*, Mémoires de la Délégation Archéologique en Iran 40. Paris: Paul Geuthner.
- Grillot, F. 2001. Le monde d'en bas en Susiane. *Revue d'Assyriologie et d'Archéologie Orientale* 95/2: 141–148.
- Koch, H. 1995. Theology and Worship in Elam and Achaemenid Iran. In: Sasson, J.M. (ed.) *Civilizations of the Ancient Near East* 3. New York: C. Scribner's Sons, 1959–1969.
- Labat, R. 1971. Elam III. Religion. In: *Cambridge Ancient History (CAH)* II/2, chapter XXIX, Elam c. 1600–1200 B.C. Cambridge: Cambridge University Press, 399–416.
- Malbran-Labat, F. 2004. La fête en Élam dans le culte royal et les cérémonies populaires. In: Mazoyer, M., Pérez Rey, J., Malbran-Labat, F. and Lebrun, R. (eds.) *La fête. La rencontre des dieux et des hommes*, Collection Kubaba, Série Actes 4. Paris, 39–48.
- Miroschedji, P. de 1981a. Le dieu élamite Napiriša. *Revue d'Assyriologie et d'Archéologie Orientale* 74: 129–143.
- . 1981b. Le dieu élamite au serpent et aux eaux jaillissantes. *Iranica Antiqua* 16: 1–25.

- Potts, D.T. 2010. Elamite Temple Building and Appendix 2: Catalogue of Elamite Sources. In: Boda, M.J. and Novotny, J. (eds.) *From the Foundations to the Crenellations. Essays of Temple Building in the Ancient Near East and Hebrew Bible*, Alter Orient und Altes Testament 366. Münster: Ugarit-Verlag, 49–60 and 479–509.
- . 2011. Iran. In: Insoll, T. (ed.), *The Oxford Handbook of the Archaeology of Ritual and Religion*. Oxford: Oxford University Press, 811–825.
- Vallat, F. 2003. Suse: G.1. La religion suso-élamite. In: Briand, J. and Quesnel, M. (eds.) *Supplément au Dictionnaire de la Bible* 74: cols. 529–553.

CHAPTER THIRTY-SIX

Elamite funerary practices



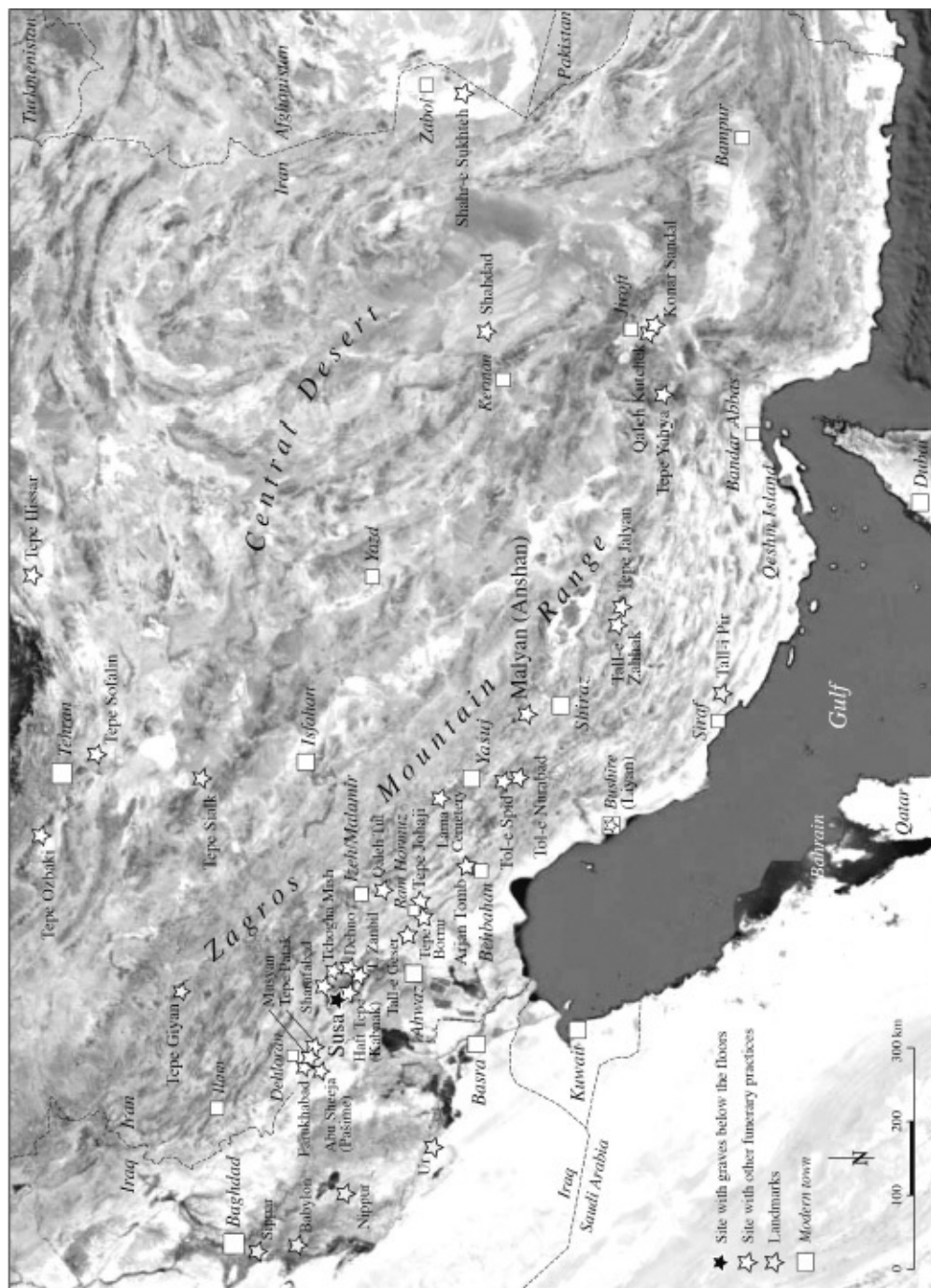
Hermann Gasche and Steven W. Cole

The term ‘Elam’ seems to designate a collection of ill-defined territories that extended over Susiana and the Zagros mountain range as far as the border of the central Iranian desert ([Figure 36.1](#)). At around 3000 BC, so-called Proto-Elamite texts appeared. These texts, still incompletely deciphered, were mostly written in Susa (Le Brun and Vallat 1978; Scheil 1900: 130–131, 1905: 57–129, 1908: 97, 1923 and 1935), but smaller numbers have been found in north, west and south Iran, from Tepe Ozbaki (Vallat 2003)¹ and Tepe Sofalin (Hessari 2011: 37, Figure 3, 43–45) – near Tehran – to Shahr-e Sukhteh, close to the southern border with Afghanistan. Little is known about the political organization in this large area, and the geographical construct ‘Elam’ (KUR NIM^{KI}) appears first only in late Early Dynastic Mesopotamian texts (Steve et al. 2002–2003: 422).

By the end of the third millennium, Elam’s eastern limit may have been in the modern province of Kerman. Indeed, recent excavations have revealed possible Elamite linear inscriptions at Konar Sandal, some 25 km south of Jiroft (Madjidzadeh and Pittman 2008: Figure 14; Desset 2014). This would locate the eastern border some 550 km from Anshan (Malyan) – Elam’s highland capital – and some 1,000 km from lowland Susa, which became the main political center in the early second millennium. This enormous territory is nevertheless far from being a homogeneous entity (Mofidi-Nasrabadi 2010b: 109). As for the southern border, the Gulf was a natural limit, although no pre-Parthian settlements are known along the narrow and inhospitable coastal strip between Bushire – ancient Liyan – and the Iranian Makran.² Finally, the northeastern limit seems to follow the western border of the Iranian central desert, but the extension beyond the modern provinces of Ilam and Luristan is more difficult to fix. However, during the less documented first half of the first millennium BC, the so-called Neo-Elamite period (*ca.* 1050–1539 BC according to Steve et al. 2002–2003: 470), Elam’s territory shrunk more or less to the northeastern lowland of modern Khuzestan before it finally became incorporated in the Persian Empire.

Within this area, a number of ancient sites have been investigated. Our survey of the excavations in this vast region reveals that graves were not found below private houses as in

Mesopotamia but rather in cemeteries or on abandoned archaeological mounds. The one notable exception is in the lowland capital of Susa, where graves are below houses in some residential areas.³ Susa, however, was located near the western border of Elam and therefore would have been a natural destination for peoples migrating from the Mesopotamian plain when southern Babylonia became progressively deurbanized beginning about the 11th or 12th year of Samsuiluna's reign (1643 or 1642 BC)⁴ (see Stone 1977: 270; Gasche 1989: 134–139, plan 8; Armstrong and Gasche 2014: 2 and Table 9).



[Figure 36.1 Map of Iran showing archaeological sites mentioned in text.](#)

Such migration is reflected in Ghirshman's *Chantier A* at Susa, where the number of domestic burials increased by some 400% between the middle of the 17th century and the middle of the 15th century BC. It is also interesting to note that in the second half of the 16th century BC Babylonian ceramic techniques were introduced in Susiana (Gasche 2013: 75, Figure 3). Some of the houses where sub-floor burials were found also exhibited architectural features that were in common with nearly contemporaneous houses in southern Babylonia, most notably at Ur. By contrast, during this same period, with the exception of two infant burials found in servant quarters, no graves were found below the floors of the large residences uncovered in Levels A XIV,⁵ A XIII and A XII (ca. 1640–1440 BC), all having a similar plan and all being located in the same area of *Chantier A*. We do not know the names of the owners of the residences found in Levels A XIV and A XIII, but the archive found in the A XII residence ([Figure 36.2](#)) belonged to a notable Elamite, named Attaru-uktuh, who corresponded directly with the *sukkalmah*.

In the following section we offer observations on funerary practices within the extensive area described above as they appear in the archaeological documentation from approximately the mid-third millennium BC down into the first millennium.

In 1968, Ali Hakemi (1969, 1970; see also Amiet 1973) discovered a large site near Shahdad, formerly Khabis, a small town located 65 km east of Kerman on the fringes of the great Lut desert. Erosion and irrigation activities had brought to light many burials – mostly simple pit graves – in the area called 'Cemetery A'. A total of 382 graves were excavated without reference to stratigraphic context and dated between 2750 and 2100 BC (Hakemi 1997: 47). Massimo Vidale (2008: 536) and Holly Pittman (1984: 11) have proposed more recent dates, between 2500 and 2000–1800 BC, but the end of this suggested period may well be later, as a very diagnostic globular jar found in Shahdad (Hakemi 1997: Figure 20) is paralleled in the Susa Middle Chronology Sequence of the 18th/early 17th century (Gasche 1973: Pls. 23: 36 and 24: 18).

The skeletons had suffered from highly saline soils, and strong wind erosion scattered or destroyed many graves that were located close to the surface. Despite these unfavorable conditions, unexpected objects were unearthed: 14 of the graves contained male clay statues in upright or seated position, measuring between 28 and 80 cm high. Three other graves yielded male clay heads. Smaller clay statues of standing or sitting women – 29 and 31 cm high – were found in three graves, while two contained female clay heads. Some of the Shahdad statues are painted or show traces of paint: hair, eyebrows and beard in black, face and body in yellow or dark yellow.

Clay statues have not been found anywhere else in Elamite funerary contexts, although painted life-size clay heads of both women and men are attested in 15th century graves at Susa.⁶ In addition, in nearby Haft Tepe, ancient Kabnak, two finely crafted life-size clay heads – one of a man and one of a woman – and a clay mask of a man were found in a late 15th

century workshop (Negahban 1991: 37–39, Pl. 3a and 24). The excavator viewed the clay heads as portraits of king Tepti Ahar (ca. 1400 BC), a contemporary of the Kassite Kadašman-Ḫarbe I (Cole and De Meyer 1999) and of his wife, but the similarities these clay heads share with the slightly earlier examples from Susa suggests they were produced for funerary purposes, whether they were portraits or not.

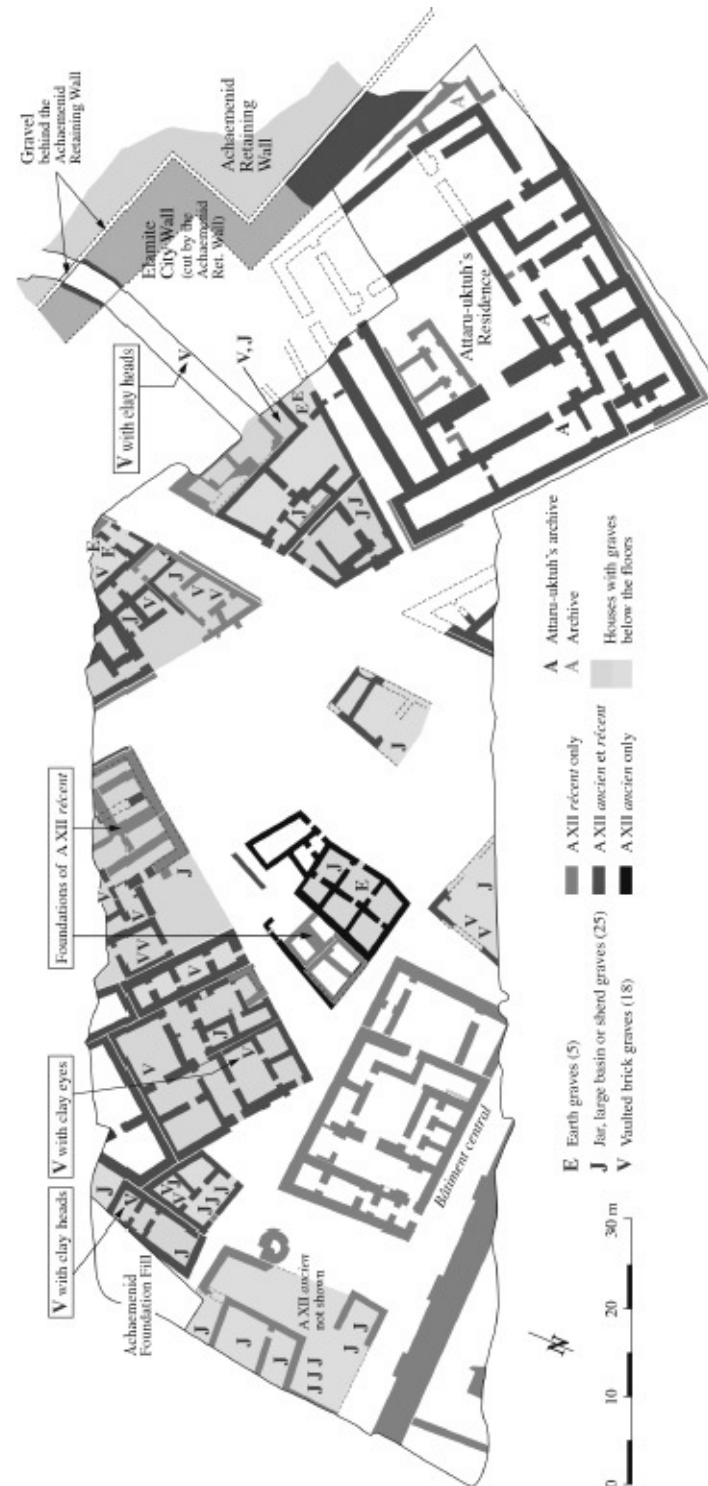


Figure 36.2 Susa, Ville Royale. Ghirshman's Chantier A. Levels XII *ancien* and *récent* (ca. 1500–1440 BC). Partially reconstructed plan.

In addition, terracotta model buildings were found in six graves at Shahdad, which Hakemi (1986; 1997: 48) interpreted as model temples. Other offerings consisted of local plain red ware jars, painted black on buff and orange ware jars, handmade pottery, chlorite vials, beakers, bowls and boxes like those found at Konar Sandal, stone and metal vessels, copper or bronze tools, weapons, pins and a mirror, one lead (?) funnel and one lead (?) mace, shells, beads, necklaces and one mat basket. Traces of textiles may indicate that the deceased had been clothed; in some graves the body was covered with matting or was laid on some kind of platform.

Some 200 km south of Shahdad is the modern town of Jiroft, located at the northern end of a plain irrigated by the Halil river. A significant number of sites were mapped in this plain, one of the most important being the late third, early second millennium archaeological complex of Konar Sandal with its monumental constructions, plundered cemeteries and their rich but mainly orphaned steatite or chlorite objects.⁷ The poor state of conservation of the graves may be the reason why no information about the position of the skeletons is available. As for finds other than the chlorite objects, the excavator noted plain and painted vessels paralleled at Shahdad, Tepe Yahya and Shahr-i Sokhta, human and animal heads and torsos in marble, bronze statues of humans and animals, and model temples (?) similar to one of those found at Shahdad. The recent discovery of possible Elamite linear texts at Tepe Konar Sandal (Desset 2014) suggests this area may have belonged to the Elamite world.⁸

About 5.5 km northwest of Konar Sandal (North) is the roughly 75-hectare site of Qaleh Kutchek, which is composed of several mounds. Islamic, Seleuco-Parthian, Achaemenid and possible Bronze Age cemeteries are located outside the ruins to the east and northeast of the site (Azadi et al. 2012). The Bronze Age graveyard, which was unexcavated and had been heavily damaged by illicit excavations, may be associated with an Elamite community.

At Tepe Yahya, 90 km west of Konar Sandal, no domestic graves were found during the possible Elamite Period IVA that extended from about 2500 to 2200 BC (Lamberg-Karlovsky 1970; Potts 2001).

In 1960–1961, approximately 300 kilometers west of Yahya, Feridun Tavallali excavated some 20 as-yet unpublished graves in a cemetery found at the surface of the prehistoric Tepe Jalyan. Miroschedji (1974: 35) dated the pottery roughly to the second half of the third millennium BC. Each grave contained one skeleton lying on its side in a flexed position, the head facing the setting sun. One to five large jars decorated with mono- or duochrome geometrical and figurative patterns were deposited with each body. In some graves a drinking vessel with a long spout was found at the head of the deceased, and three burials yielded copper mirrors.

At Tall-e Zahhak, 23 km west of Tepe Jalyan, a surface grave probably of a child buried in a ‘cauldron-like bowl’ was found by Sir Aurel Stein (1936: 138–140) at the bottom of the central mound. The grave goods suggest a possible mid-second millennium BC context.⁹ Further

west, no domestic graves were found by Maurice Pézard (1914: 39–92) at Bushehr, ancient Liyan.

Although Tall-e Malyan, 47 km north of Shiraz, had been known as an archaeological site since at least the middle of the 19th century, Hansman (1972: 111–124) was the first to suggest its identification with Anshan. Erica Reiner (1973a) confirmed this identification on the basis of inscribed bricks found in March 1971 by Ilene Nicholas (1990: xiii) and Pierre and Battya de Miroschedji. After about 1100 BC, little is known from the site. In 1961, Fereydoun Tavalloli briefly excavated at Malyan for the Archaeological Service of Iran, but there is no report of this work. From 1971 to 1978, the site was excavated by William Sumner (1987–1990, with detailed bibliography) and in 1999, Kamyar Abdi (2001), University of Michigan, conducted new investigations. Finally, the Cultural Heritage Organization of Iran and Dartmouth College dug at the site in 2004 (Alden et al. 2005). No domestic graves are mentioned in connection with any of these excavations. However, Elizabeth Carter (1996: 47) published three apparent surface graves found in Sector EDD. Only Burial 47 is of interest here, as it belongs to the early first millennium BC. The skeleton was found lying in a semi-flexed position, with the hands in front of the face. Four pins found near the neck indicate the deceased was clothed, or wore a shroud. There were also five bronze or copper bracelets on the arms, beads near the neck suggesting a necklace and a faience seal near the skull. A broken pot was situated in front of the forehead, near the left hand. A small pot and a larger one with a modest geometrical decoration (Carter 1996, Figure 46: 8) were deposited near the right forearm above the right knee. The last-mentioned vessel suggests a date around 800 BC based on the similarity of its shape with that of a pot of the same family found in Susa (Miroschedji 1981a: 144, Figure 48: 1 and Pl. xvii: 8). Finally, another small pot was found near the feet (Carter 1996: Figure 46: 9). According to Daniel T. Potts and Kourosh Roustaei (2006: 11) this burial ‘provides indirect evidence for the use of the region by a mostly nomadic population in the early 1st millennium BC’. But as there was steep population decline during this period (Miroschedji 2003: 19, Figure 3.2; Carter 1994: 65; Sumner 1987–1990: 318), one cannot exclude the possibility that the mound was used as a cemetery by the remaining inhabitants.

No burials were found in the stepped test soundings made at the Neolithic to Post-Achaemenid Tol-e Nurabad or at Tol-e Spid, both sites being situated about 120 kilometers northwest of Shiraz (Potts and Roustaei 2006; Potts et al. 2009).

Excavations took place between 2000 and 2005 (Rezvani et al. 2007) and in 2008 (Jafari 2013) in the cemetery of Lama, located some 50 km northwest of Yasuj. The site had been damaged in 1999 along with others in the Beshar River Valley¹⁰ as a result of road construction activities there. A total of 74 stone-walled individual and collective burials were unearthed in the cemetery. Most had been covered by rubble or slabs, although some had gabled roofs. A number of the graves had been reused, with the latest buried individual usually being placed in a flexed position. The grave goods consisted mainly of pottery, bronze

vessels, tools, bronze, iron and stone weapons; animal bones and even entire animals were found both within and outside some graves. The excavators conjectured that these burials belonged to a pastoral community and dated them between the late second and the early first millennium BC but a significant number of the illustrated pottery examples have earlier parallels in the Susa sequence.¹¹ It turns out that the Lama cemetery remained in use over a relatively long period.

The so-called Arjan tomb was discovered in 1982 on the left bank of the Marun River, close to the ruins of the medieval town of Arrajan, as crews did leveling work associated with the construction of a dam in the vicinity. There is no known contemporaneous settlement related to this burial,¹² which has been recently re-dated between ca. 630 and 550 BC by Javier Álvarez-Mon (2015). The undisturbed burial consisted of a three-sided, stone-walled, rectangular subterranean funerary chamber covered with large flat stone slabs (Alizadeh 1985, and more recently Álvarez-Mon 2010, 2015; Wicks 2015: 24–26, 147–148). The floor and the inner sides of the walls were coated with a lime mortar. The funerary chamber contained a U-shaped bronze coffin of a type known also from Jobaji (below), Ur (Wicks 2015: 16–22, 146–147, with earlier references), Nimrud (Hussein 2016: 29–42, Pls. 100, 101; Wicks 2015: 5–16, 144–146) and at the northwestern Syrian site of Zincirli (Wicks 2015: 30–33, 150),¹³ but the Arjan coffin is the only known example with a bronze lid. The lid, however, is preserved solely in fragments. A poorly preserved skeleton of a 40-to-50-year-old man was found lying on its right side in a flexed position. Near the forearms was an unusual gold ring with flaring engraved disc-shaped terminals bearing the inscription *Kidin Hutran, son of Kurlush* (published by F. Vallat 1984). The same inscription appears on a bronze candelabrum, a silver jar and a bronze bowl found outside the coffin. Along the back of the body was a dagger with an iron blade and an ornamented ivory (?) hilt. In addition, a broken silver tube removed before the regular excavation of the burial has been hypothetically attributed to the tomb. Near the feet and under the head were found folded cotton textile fragments, and the upper body seems to have been covered by a garment. Gold rosettes and discs were found near the torso. Loops on the reverse sides indicate they were probably attached to garments. This tomb and the one described next reveal attractive aspects of late Neo-Elamite art.

Seven kilometers southeast of the town of Ram Hormuz, on the left bank of the Ala River and at the northern limit of Tepe Jobaji,¹⁴ two U-shaped bronze coffins (Shishegar 2015; Wicks 2015: 27–30, 148–150) were badly damaged during the excavation of a pipeline in 2007. Each coffin is reported to have contained a female skeleton lying on its right side in a flexed position; one is said to have been approximately 17 years old and the other 30–35 years old. A number of metal vessels were found between the two coffins (Shishegar 2015: 282). Furthermore, the excavation report lists a rich collection of grave goods found in or outside the coffins, but only rarely is a precise location mentioned. Among the finds were an inscribed gold ring similar to the Arjan ring, gold bangles, some with inset semi-precious stones or with

animal head terminals, gold necklaces, rings, pins, gold and semi-precious beads, textiles with gold attachments and a cat's eye agate set into a gold brooch. The latter bears the name of the Kassite ruler Kurigalzu I or II (14th century BC) and may well have originated as booty from an earlier war. Remains of several daggers are also mentioned. The presence of these weapons lends only tenuous support to the notion that the two buried persons were women.

Tepe Bormi, on the right bank of the Ala River some 4.5 km southwest of Ram Hormuz, was a Neo-Elamite urban center, although Late Susiana, mid-second millennium, Middle Elamite, Achaemenid and Partho-Sasanian sherds were counted among the surface finds (Carter 1971: 274, 277–281; Wright and Carter 2003: Figure 6.7: a, b, c, e and h).¹⁵ No graves are reported at Tepe Bormi and the unexcavated mound is now extensively covered by modern constructions. A stone with an inscription of Amar-Sin (1952–1944 BC) found on the site mentions the sack of the town of Huhur. On this basis Behzad Mofidi-Nasrabadi (2005: 171) suggested identifying the ruin with this town¹⁶ but no Ur III material is reported to have been found on the surface of the mound.

Near the northwest border of the Ram Hormuz plain, 1,500 m south of the Kupal River, is the multi-mound complex of Tall-e Geser, which was explored in 1948 by Donald E. McCown (1949; see also Perkins 1949: 54. Caldwell 1957–1971; Carter 1971: 256–274; Alizadeh 2014). The site seems to have been first occupied between the late sixth and the early third millennia, later during the *sukkalmah* and Middle Elamite periods and, after another gap, between the Achaemenid and Early Islamic eras. A number of earth graves, jar burials and brick-lined tombs were excavated (see Alizadeh 2014: Figure 3–7, 9–10, 14–15 and 23), but the stratigraphic relation between the grave pits and the occupation floors is unclear.¹⁷ In the earth and brick-lined tombs, the skeleton had been placed in a stretched-out position, as at Susa during the 13th century BC, where the practice was not as generalized as in Geser.

No burials are known from the unexcavated Qaleh Tul located some 23 km south of Izeh, the occupation of which seems to have extended from the late 5th millennium to the Achaemenid period (Carter 1971: 255, n. 1).

Dur Untash, the Akkadian name of modern Tchogha Zanbil, was built as a royal town of some hundred hectares by Untash-Napirisha (ca. 1340–1300 BC) who was married to a daughter of the Kassite king Burnaburiaš II (1354–1328) (see Steve et al. 2002–2003: Tableau 1 and fn. 24 with references).¹⁸ The eastern district of the site shelters the monumental city gate and three palaces. Of these, the so-called *Palais Hypogée* (Ghirshman 1968a: 59–74, plan xi) revealed five subterranean vaulted monumental brick tombs with their walls sometimes built slightly offset from those of the palace. This anomaly led Ghirshman (1968a: 60) to consider the possibility that the tombs were built before the palace, although no detailed stratigraphic analysis is available. One should also note that three tombs were built below the rooms of the northwest wing of the *Palais*, a storage-like area, while two tombs were found below the floors of a small domestic district only reachable from the large central courtyard of the

building.

All five tombs had stairways with vaulted, very sloping access. After the interments in Tombs II to V, the stairway was filled with construction debris (Ghirshman 1968a: Figure 23: Tombs III and IV, Pl. xxxix: 2 and 3), while the access to the empty Tomb I was covered only with a provisional vault of one single course of bricks (Ghirshman 1968a: Figure 23, bottom). Where preserved, a lime mortar protected the inner sides of both the stairways and the funerary chambers (Ghirshman 1968a: Pls. xxxvii: 5 and xliii) and bitumen was used to render them impermeable. Tombs II, III and V had two perpendicular funerary chambers, while I and IV each had one room. Their lengths ranged from 7.80 m for the smallest (T. V) to 16.90 m for the largest (T. IV). The widths were mostly around three meters and the heights of the vaults reached 3.70 to 3.90 m.¹⁹ Seven clandestine pits were dug into Tombs II, III, IV and V (for the location of these pits see Ghirshman 1968a: plan XI), but surprisingly, no such pit had reached Tomb I; therefore, one might assume that the looters knew this tomb was empty and, by deduction, the plundering of the others occurred shortly after their construction.

Tchogha Zanbil was abandoned at the latest during the reign of Shutruk-Nahhunte (ca. 1190–1155 BC), since this king brought to Susa the steles erected by Untash-Napirisha at *sian-kuk*.²⁰ In the end, the site was in full use for only a little over a century. The novelty at Dur Untash, however, is the practice of cremation, which is rarely attested in the Elamite world. In the first chamber of Tomb II was a heap of ashes and the half-burnt bones of three individuals were discovered, while the second chamber revealed those of five individuals; all were cremated with their grave goods (Ghirshman 1968a: Pl. xc), which included three “clay olives” inscribed possibly with a proper name or a title so that the deceased might have an identity in the afterlife (Steve 1967: 103, no. 61 and Pl. xxi: 1–3). Tomb III contained two heaps of ashes and burnt bones in each chamber but the surviving grave goods consisted only of two identical common jars (Ghirshman 1968a: 65, Pl. xc: G.T.-Z. 897). The one-room Tomb IV contained a brick platform²¹ (Ghirshman 1968a: 67, Pl. XLIII) on top of which were two heaps of ashes and burnt bones apparently collected in a red painted wool tissue with a bronze bracelet and a number of more or less small fragments in bitumen, molten glass, bronze, gold, silver and lapis lazuli (respectively Ghirshman 1968a: p. 67, Pls. XLIV: 1, XCI: G.T.-Z. 972 and p. 67 and 71, Pls. XLIV: 2–3, XCI: G.T.-Z. 971, 975: a and b, 976: a and b, 977, 979 and 980). Beside the two heaps of ashes was the complete skeleton of a woman who had died at between 40 and 50 years of age (Ferembach 1968). She rested on her left side with flexed legs, the left hand near the lumbar vertebrae and the right hand under the left cheek. Close to her feet was a common jar (Ghirshman 1968a: Pl. xcl: G.T.-Z. 986) identical to those found in Tomb III. Another common jar (Ghirshman 1968a: Pl. xcl: G.T.-Z. 985), three unbaked high-footed bowls containing charcoal (Pl. xcl: G.T.-Z. 982–984) and a small common bowl (Pl. XCI: G.T.-Z. 987) were deposited at the foot of the platform. It seems that the looters of Tomb V²² brought the ashes and objects to the room above (Ghirshman 1968a: 71) in order to sort through what they

were interested in. Because of the location of the tomb under the so-called “domestic wing” of the palace, Ghirshman (1968a: 71) believed that it was the burial place of the royal family, while he left unanswered the question of the status of the individuals buried in Tombs I to IV.

Cremations were also observed in the district of the so-called *Entrée Royale*,²³ which was the only known gate of the town. Three unregistered but probably open large vessels each contained the burnt bones of a child. No cover and no grave goods were reported, and one of the burials was at least partially dug into the wall of the gate. There is no other information about the stratigraphic relation with the building, which prevents us from proposing a date for the burials. Four earth graves and three subterranean one-room vaulted mud-brick tombs were excavated outside the central *Temenos* district (Ghirshman 1968a, 101–107; see Mofidi-Nasrabadi 2012a, Figure 8 for the location of the three vaulted mud brick tombs). The three mud-brick tombs were similar in shape, with a pit-like access and a deeper funerary chamber also coated with lime mortar. However, the upper parts of their vaults were shattered. Access to the funerary chamber of both Tombs 1 and 2 was blocked by a large stone slab, while access to Tomb 3 was open. According to the pottery therein, the three tombs are contemporaneous and belong to the occupation period of the site (late 14th and 13th centuries BC).

Tomb 1 is located in the southeast district, near the temple of Nusku. It contained two skeletons, each in a semi-flexed position, the hands in front of the face, lying on a platform built along the long walls of the chamber. One of the deceased was wearing a necklace of semi-precious stone beads (Ghirshman 1968a: 104, Pls. LXIV: 4 and XCVIII: G.T.-Z. 1119), and two stone seals (Porada 1970: Nos. 161–162) were found nearby. The second individual had been entombed with an inscribed lapis lazuli cylinder seal bearing the name of its owner (Ghirshman 1968a: 104; inscription in Reiner 1970: 137, No. 109), four bronze bracelets and two rings (Ghirshman 1968a: 104, Pl. XCVIII: G.T.-Z. 1118a-d). A bronze lamp and three common jars (Ghirshman 1968a: Figure 43, Pl. XCVIII: G.T.-Z. 1120 and 1121a-b) were dispersed across the chamber (Ghirshman 1968a: 104, Pls. LXIV: 4 and XCVIII: G.T.-Z. 1119).

Tomb 2 is situated on the opposite side of the town, near what Ghirshman interpreted as a water reservoir.²⁴ The disturbed skeletons of at least three individuals were found on platforms built along the three walls of the chamber. A necklace of semi-precious stone beads, two silver braided hair rings, two bronze rings, and a small object in flint (Ghirshman 1968a, Figure 44, Pl. XCVIII: G.T.-Z. 1123 and 1122a-c) were discovered among the human bones on the northeast platform, while a bronze bracelet – covered with an elaborated bronze sheet – and two hollow bronze anklets were found on the southeast platform (Ghirshman 1968a: Figure 44, Pl. XCVIII: G.T.-Z. 1125 and 1126). Some broken objects were uncovered on the third platform, and 14 identical common jars were found in various locations in the chamber (Ghirshman 1968a: Figure 44, Pl. XCVIII: G.T.-Z. 1127 and 1124).

Tomb 3 is located in the same district as Tomb 2 but at some distance inside the northern

corner of the city wall. On the platform in the back of the chamber a single skeleton was found lying in a flexed position, along with bones of a second individual, while the remains of at least seven skeletons were found on the adjacent platform of the long side of the chamber. Two bronze rings, three semi-precious stone beads, three bowls, three oval shaped lamps and 25 common jars constituted the grave goods (Ghirshman 1968a: Figure 45 and Pl. XCIX: G.T.-Z. 1128, 1129, 1133, 1130–1132 and 1134–1136).

Finally, four earth graves were excavated in a test trench dug near the *Palais Hypogée*. However, these belong to the late 12th and 11th centuries and show that the site was used for interments after it had been deurbanized.

Seven and a half kilometers northeast of Tchogha Zanbil, on the right bank of the conjoined Loreh and Gelal Rivers, is the trapezoidal shaped Tepe Dehno, some 20 m in height and 5 ha in area (aerial view in Steve 1987: Pl. I: 2). The town seems to have been occupied during the first half of the fourth millennium BC, the mid-third millennium, the early- and mid-second millennium, and in the Parthian period (Steve 1987: 11–13). Strong rainfall erosion on the southeast side of the mound led Mofidi-Nasrabadi (2013) to excavate in this area, where he found a vaulted brick tomb that most probably belongs to the late *sukkalmah* – early Middle Elamite periods.²⁵ Three skulls and some postcranial bones – one of them with a ring – and 12 pots were found inside the tomb, while sheep or goat bones together with fragments of a large vessel were found in the grave pit.

Haft Tepe, ancient Kabnak, is located 13 km southeast of Susa. Ezat O. Negahban (1969, 1991) excavated large areas of the site between 1965 and 1979 following the fortuitous discovery of a brick wall that proved to belong to a building that Negahban arbitrarily interpreted as the *Tomb-Temple Complex of Tepti Ahar* (Negahban 1991: 7–9, 20–22, Pls. 6–8),²⁶ a possible contemporary of the late 15th century Kassite king Kadashman-Harbe I (Cole and De Meyer 1999). Beza Mofidi-Nasrabadi (2012a: 266) also thought that Tepti Ahar built the *Complex of Tepti Ahar*, although he favored a later date for the actual deposition of the bodies. Some 25 years later Mofidi-Nasrabadi (2012a: Figs. 3–4) conducted a geomagnetic survey of the site that revealed large monumental buildings west and southeast of Negahban's field activities. He also excavated in three new areas (Mofidi-Nasrabadi 2010a, 2011, 2012a, 2012b and 2014).

In the slightly older, small, dwelling-like district located west of the *Tomb-Temple Complex* Negahban (1991: 22–23) found a pottery sarcophagus (Negahban 1991: 22, Pls. 19: A-B and 20: A),²⁷ jar burials containing or covering the deceased (Negahban 1991: 22, Pl. 19: C) and earth graves (Negahban 1991: 23, Pls. 20: B and 21). However, no precise stratigraphic information is at hand. Negahban attributed the *Tomb-Temple Complex* to king Tepti Ahar (and his family) based on a large fragment of an inscribed stele found in the courtyard of the building. However, according to Erica Reiner (1973b) this stele simply derived from a royal tomb. There is no allusion to a *Temple* in the inscription. On the other hand, Mofidi-Nasrabadi (2012a) drew

parallels with the *Palais Hypogée* of Tchogha Zanbil.

The two adjacent northern rooms of the building each contained a vaulted brick tomb (Negahban 1991: 20–22, color Pl. 2: 2, plans 2–4; Mofidi-Nasrabadi 2012a: 265, Figure 9; 266, Figure 11). The larger northeastern tomb (Negahban 1991: plan 4, incorrectly oriented; Mofidi-Nasrabadi 2012a: Figure 1; 2012b: Figure 12, correct orientation) contained a long but low platform²⁸ with two long sections separated by a short one. In the long sections and in the southwest corner of the funerary chamber were the remains of some 20 skeletons, of both adults and children, mostly found in flexed or semi-flexed position. The overall picture suggests successive depositions, although the individuals found in the southwest corner of the chamber seem to have been laid down hurriedly near the entrance. The slightly smaller adjacent tomb presents a different picture. Fourteen individuals had been laid out side by side in more or less stretched-out positions; another nine skeletons had been placed on the chests and lower limbs of the former individuals. The orderly arrangement seems to indicate that all the individuals were buried together following an unusual event. Unfortunately, no study of the skeletons is available. No grave goods are reported from these two brick tombs, a circumstance which increases the likelihood that the bodies therein had been hastily laid to rest. According to Mofidi-Nasrabadi's (2012b: 99, Tab. 4) chronostratigraphic reconstruction the tombs were built during his *Bauschicht* III following a destruction observed in *Areal* I, II and III of his excavations.

Finally, Mofidi-Nasrabadi excavated 22 Middle Elamite earth and jar-burials, one sarcophagus and one *Scherbengrab*.²⁹ These were all dug into or near the ruins of the so-called *Complex C* and the more southern *Administrative Building*. A second sarcophagus was found in an already uninhabited house located next to the *Administrative Building* (Mofidi-Nasrabadi 2011, esp. p. 152; Mofidi-Nasrabadi 2012b: 58, 91–92, Grab 14; 95, Tab. 1 and 97). It contained an adult in a semi-flexed position, his skull and shoulder protected by a large broken jar. The grave goods were mostly found in the covered area of the tub and consisted of three small globular ceramic jars – a fragment of the same type was found near the pelvis –, one bronze cup, one glazed pyxis, two bronze rings, three silver pins, a number of gold and stone beads supposedly belonging to a necklace. Also among the grave goods were two Elamite cylinder seals with Akkadian inscriptions bearing the name Ginadu, a high official of the king Inšušinak-sunkir-nappipir. According to Mofidi-Nasrabadi, none of the graves he excavated at Haft Tepe were dug below occupation floors.

The lowland metropolis Susa – founded around 4000 BC on the eastern bank of the perennial Karkheh River – shows a different picture. Several hundred third and second millennia BC burials were found by Roland de Mecquenem on the mound called Apadana, east of Darius I's palace (Mecquenem 1922: 117–123; for location of this operation, see Steve and Gasche 1996: Figure 1; see also Tavernier 2013); and at the Donjon (Mecquenem 1943: 74–137), the southern district of the *Ville Royale*. We will not consider these burials, however,

because of insufficient stratigraphic information. For similar reasons, we will not deal with Ghirshman's mid-second millennium burials found in a trench opened in the 1950s at the very northern edge of the Apadana mound (for the location of this operation, see Steve et al. 2002–2003: Figure 5, no. 24 and for the unusual way this excavation took place, see Steve and Gasche 1990: fn. 7). Also, because there are insufficient field records of the burials found in Levels XI, X and IX (ca. 1440–1125 BC) of Ghirshman's *Chantier A* in the *Ville Royale* we consider here only the burials excavated in Level XV to Level XII (ca. 1700–1440 BC), for which we do have detailed stratigraphic information. Finally, Ghirshman transferred his activities to *Chantier B* after natural soil was reached in the western area of Level XV of *Chantier A*.³⁰ In *Chantier B* he attempted to complete the second millennium stratigraphy on one of the platforms of Mecquenem's enormous *II^e chantier* (see topographic sketch and oversimplified cross section in Mecquenem 1934: 178, Figure 1, 219 Figure 64). In this area Ghirshman excavated portions of private houses dating to the mid-20th to mid-16th centuries BC (for a preliminary report, see Ghirshman 1968b; for a revised stratigraphy, Gasche 1973: 10–11 and Armstrong and Gasche 2014: Table 9). We will not deal with the burial data from *Chantier B*, however, because this evidence is much more limited and therefore much less informative than the evidence from *Chantier A*.³¹

Level XII *récent* and XII *ancien* (ca. 1500–1440 BC): 48 burials were uncovered in 15 houses of a total of at least 22 (see [Figure 36.2](#)). A brick tomb revealed two bitumen painted clay eyes found at some distance from the skull. There were eight life-size painted clay heads in two other brick tombs. One of these tombs was found in a small, elongated building with no preserved entrance on the west side of the *Chantier* and was disturbed by an Islamic well. The second tomb was uncovered in the evacuation trench leading to the dump on the opposite side of the *Chantier* and was well preserved. It contained three inhumations. The first is evidenced by a fragment of a clay head with a few human bones shoved to the side. The second and third are evidenced by the skeletons of a man and a woman, each with a painted clay head deposited on the skull (Ghirshman 1964: 10, Figs. 23–24; 1965: 5, Figs. 11–14. Amiet 1966: Figure 347). This practice continued in Level XI, where a painted but less nicely crafted clay head of a woman was uncovered in an earth grave. This head, however, was found on the abdomen of the deceased, the face turned down.

Level XIII (ca. 1570–1500 BC): 24 burials were found in 11 houses of a total of at least 22. In addition, two burials had been dug below public domains but close to the houses' facades and one burial was found in an area disturbed by later large pits. In a brick tomb two life-size bitumen painted clay eyes were found near the left shoulder of one of the two undisturbed skeletons (Ghirshman 1965: 5, Figs. 15: 4 and 18: above).³² However, Ghirshman's (1965: 5) hypothesis that these eyes were part of a mask is unsupported by the evidence.

Level XIV (ca. 1640–1570 BC): 12 burials were uncovered in five houses of a total of at least 10.

Level XV (ca. 1700–1640 BC): five fetuses or newborn babies were buried together below the floor of one house, and an older child was found below another house. The floors of Level XV, however, were not thoroughly investigated (see above).

Level Pre-XV (ca. 1750–1700 BC): no burials were discovered but the area excavated was small.

The reader will observe that there was a 400% increase in the number of domestic burials between Levels XIV and XII (ca. 1640–1440 BC), coinciding with the period when southern Babylonia was progressively deurbanized beginning in year 11 or 12 of the reign of Samsuiluna, king of Babylon between 1653 and 1616 BC (Armstrong and Gasche 2014: 2 and Table 9). Moreover, these burials were found only in the smaller houses in these levels. No burials were found under the large residences, which most probably belonged to Elamite notables,³³ with the exception of a fetus or newborn baby and an infant less than one year old interred in the service areas of the large Level XIII residence on the eastern extremity of *Chantier A*. These were perhaps the children of local servants. In summary, eight painted clay heads and two pairs of clay eyes were found in four burials. All belonged to Levels XII and XIII. These clay heads and eyes are the only such items from recorded stratigraphic contexts. Those found by Mecquenem have no context; we do not even know where they originated. The deposition of such items with deceased individuals is reminiscent of the earlier practice evidenced in the Shahdad cemetery, where painted life-size clay busts and heads were unearthed in contexts dating at least some 150 years earlier. The two life-size clay heads and clay mask uncovered in a late 15th century workshop at Haft Tepe may have been crafted for similar purposes. The practice of placing effigies in tombs is relatively widespread in the ancient Near East. Their purpose is obscure, although one can imagine that the heads and eyes were meant to lend perception to the deceased in the afterlife.

The ruins of Tepe Sharafabad, which cover an area of about two hectares, is located some 15 km northeast of Susa and two kilometers east of the Dez River. Excavations conducted in 1971 (Schacht 1975; Schacht and Wright 2010) revealed a relatively continuous occupation between ca. 5500 and 2800 BC and, in our opinion, between the 17th and the early 14th centuries BC based on the published pottery and terra cottas (Schacht 1975: Figure 6, 7 and 9: a-f). Apart from late surface graves, no burials under occupation floors are mentioned.

Excavations at the North Mound of Tchogha Mish revealed an “Old Elamite” fort of some 95 m by 140 m with some occupational remains (Delougaz and Kantor 1996: 18–25). The most characteristic sherds found in the fort are paralleled in the Susa sequence of the early/middle *sukkalmaḥ* period (Delougaz and Kantor 1996: Pls. 77: A, J and 78: A-G. See Gasche 1973: Pls. 3: 7; 23: 28; 25: Levels B V and VI). No burials are related to the fort, but two undated graves, both unpublished, were dug into the southern slope of the North Mound (Delougaz and Kantor 1996: 22).

Along the piedmont, some 95 km northwest of Susa, Gautier and Lampre (1905) excavated

at Tepe Musyan and also surveyed a number of sites in the surrounding area. At Musyan itself, two burials of probable mid-second millennium date are mentioned, but there is no stratigraphic information available. In 1977, east of Tepe Musyan, Miroschedji (Miroschedji 1981b: 172–174, 184, Figure 60; 1986: 216–220, Figures 1–4) conducted a survey in the part of the Patak plain that is situated along the left bank of the Duwairij River. According to the published report, there were five or six Middle Elamite sites in this region, including Tepe Patak, but no burials are mentioned.

Some 12 km north-northwest of Tepe Musyan, on the left bank of the Mehmeh River (= Tib River in Iraq), lies the site of Farukhabad, where the excavators uncovered three burials in the second-millennium BC layers (Wright 1981: 197–198). Abu Sheeja, ancient Pašime³⁴ has been recently localized on the Mehmeh River, some 7.5 km inside present-day Iraq. Pottery of the mid-*sukkalmah* period³⁵ was found in a pit and in a grave dug into the debris of a possible Akkadian- and Ur III-period temple dedicated to the Elamite god Šuda, which perhaps reflects a tradition of using abandoned sacred places for burying the dead. In conclusion, the Elamites did not bury their dead below the floors of their houses – except at Susa, where Mesopotamian influence was often pronounced.

Notes

- ¹ A clay tag or label found more to the east, at Tepe Hissar, has three inscribed signs or symbols that are unlikely to be Proto-Elamite (Dyson 1987: 659).
- ² The only pre-Parthian site in this area is the fourth millennium Tall-i Pir, located 20 km off the coast, behind a mountain range running east of the Partho-Islamic settlement and grave complex of Siraf, ancient Taheri. Second and first millennium BC remains from Qeshm Island, southwest of Bandar Abbas, have been reported by Rad (1969–70), but no other information is available. The opposite Arabian coast, by contrast, has been settled since the 7th millennium (Rice 1994: 327–331, Beech *et al.* 2016). However, because present climatic and marine conditions point to the possible existence of harbors on the Iranian coast (see for example During Caspers 1971: Figure 1), new surveys of the eastern littoral of the Gulf might yield interesting results.
- ³ See also hereafter the ambiguous situation at Tall-e Geser.
- ⁴ All dates introduced hereafter refer to the chronology proposed in Gasche *et al.* 1998. Supporters of the Middle Chronology must add 96 years to the dates of the First Dynasty of Babylon and 93 years to those of the Third Dynasty of Ur.
- ⁵ The earlier residence of Level A XV was only partly excavated.
- ⁶ For a well-preserved example found by Mecquenem at Susa, see Amiet 1966: Figure 350. For an inventory of the heads found at Susa and Haft Tepe, see Álvarez-Mon 2005.
- ⁷ The Musée du Louvre analyzed the steatite/chlorite objects found at Susa and established that they are chlorite (Miroschedji 1973, fn. 3; see also his Figures 6 and 13 for the distribution in Iran, southern Mesopotamia and the Gulf

area before the discoveries at Jiroft). For the grave goods, see Madjidzadeh 2003a, 2003b; Perrot 2003; Cleuziou 2003; Perrot and Madjidzadeh 2005; Madjidzadeh and Pittman 2008. However, Muscarella (2001: 182–189) and Amiet (2002: 96) draw attention to a number of forgeries or probable forgeries among the objects published by Madjidzadeh (2003a) who, in turn, defends their authenticity (Madjidzadeh and Pittman 2008: fn. 19). In addition, Amiet (2002) strongly rules out Madjidzadeh's (2003a: 6) offhand hypothesis *that a considerable part of the Sumerian art may have originated in southeastern Iran, in the region of the present province of Kerman*.

- 8 According to Steinkeller (2006: fn. 4), Madjidzadeh's (1976; 2003a: 12, 19) attempts to locate the mythical land of Aratta in the region of Jiroft is completely unlikely.
- 9 See Stein 1936, Pls. xi: Figure 10; xix: 8; xx: 17–20; xxix: 42. The sherds illustrated on Pls. xxviii: 5 and xxix: 1 (glass) and 29 are not grave goods but were probably displaced by erosion.
The 'cauldron-like bowl', could be related to the large vessels of Group 35, Variant b of Gasche 1973, 49–50, Pl. 44 = Group 265 A 3 of Armstrong and Gasche 2014, 69, Pl. 124.
- 10 Taj Amir (excavated in 2012, see www.berasad.com/fa/content/view/10214/), Mahmoudabad, Dorhan, Chenar Barm and possibly more, see Jafari 2013: 59.
- 11 For Rezvani *et al.* 2007, p. 83: 11, compare Gasche 1973: Pl. 31: 4 and for p. 83: 17, compare Gasche 1973: Pl. 14: 12; for Rezvani *et al.* 2007, p. 99: 4, see Gasche 1973: Pl. 20: 2. For Jafari 2013, Figure 20: 7105289, see Gasche 1973: Pl. 22: 26. The Susa parallels are dated between the mid-16th and the early 14th centuries BC.
- 12 See Gaube (2011) for the history and dating of the medieval town. According to Tawhidi and Khalilian (1982: 242), prehistoric pottery was found at the surface of the medieval mound, but there was no material contemporaneous with the burial.
- 13 Other comparable coffins or fragments – mostly unexcavated – were found in Susa or said to be found near Khorramabad (certainly not Parthian in date as written in www.cais-soas.com/News/2006/April2006/07-04.htm), in northwest Iran (including one at Ziwiye), in north Iran (Amlash area) and in eastern Anatolia.
- 14 Tepe Jobaji is a large site consisting of several mounds with Middle Elamite, Neo-Elamite and possibly Achaemenid sherds, see Alizadeh 2014: 240–241, 291 (RH-058), Pl. 51 (location) and 120 (surface pottery). See also Shishegar 2015, Henkelman 2008: 32, fn. 82 and Álvarez-Mon 2013: 467–468.
- 15 During a survey conducted in 1977, Miroschedji (1981b: 170 and fn. 10) found a fragment of brick with a Neo-Elamite inscription at Tepe Bormi. The inscription was published by Vallat in 1981. Another six mounds of the western Ram Hormuz plain were also occupied during the Middle Elamite period (Wright and Carter 2003: Figure 6.6).
- 16 Followed by Álvarez-Mon (2010: 204) and Henkelman (2008: 17, fn. 29, 245). Alizadeh (2014: 238, fn. 84) doubts this identification but formulates no other hypothesis. Duchêne (1986) suggests locating Huhnur at Arrajan.
- 17 On the maps, the graves are shown with the layers in which they were found, not with those from which they were dug.
- 18 Tchogha Zanbil lies 33 km southeast of Susa on the northern edge of the Haft Tepe anticline (see Cole and Gasche 2007: Figure 68) close to, but some 35 to 40 m above, the Dez River. The site was sounded between 1936–1939 and during a few days in 1946 by Mecquenem and Michalon (1953: 1–5), widely excavated by Ghirshman between 1951 and 1962, and has been reinvestigated since 1999 by Mofidi-Nasrabadi (2007) in the frame of a UNESCO Project for the preservation of the monument (see Mofidi-Nasrabadi's plan 2 for the location of his excavated areas A, B and C and

plans 3 to 9 for the location of the districts he surveyed).

- [19](#) All measures are those of Ghirshman's published plans, not those given in his descriptions, often inaccurate.
- [20](#) For the equivalence Dur Untash = *siyan-kuk* see König (1977: 75–76) and Grillot and Vallat (1978: fn. 3).
- [21](#) Compare the platform found in the northeast burial of the so-called *Tomb-Temple Complex of Tepti Ahar* at Haft Tepe.
- [22](#) The vaults of the stairway of the first funerary chamber were partly destroyed (Ghirshman 1968a: 71, Figure 30 and Pl. XLV: 1).
- [23](#) They are only mentioned on plan XV of Ghirshman 1968a.
- [24](#) See now the arguments of Mofidi-Nasrabadi (2007: 25–28) and Badamchi (2015) for a different interpretation of this structure.
- [25](#) Compare Mofidi-Nasrabadi 2013: Pl. 10: D.N. 12–1227–59 and 60 with Negahban 1991: Figure 3: 31 and Gasche 1973: Pl. 21: 28 (late Level A XIII = *ca.* 1500 BC) and Pl. 22: 3 (Level A XII = *ca.* 1500–1440 BC). Carter's (1979) attempt to re-date Ghirshman's second millennium Levels XIII to IX of *Chantier A* (see Mofidi-Nasrabadi 2013: 102 and fn. 21) was firmly rejected 36 years ago by Steve *et al.* 1980: 49–65.
- [26](#) Tepti Ahar was probably the last of the “Kidinuid” rulers (Steve *et al.* 2002–2003: 452–457). However, the succession, eventual filiation and lengths of the reigns of the “Kidinuids” are unknown. Although Haft Tepe was a significant Middle Elamite urban center, the pottery found by Negahban shows that the site was already occupied at least during the 19th and the early 18th centuries BC: compare, for example, Negahban (1991: 30, Figs. 8: 77–83 and Pl. 23: 84) with Gasche 1973: Pl. 25: B V–VI. See now Armstrong and Gasche (2014: 12 and Table 9) for the chronology of B V and B VI. A recent interpretation of the chronology of the Middle Elamite occupation at Haft Tepe is based on 25 C14 analyses (Mofidi-Nasrabadi 2015). Unfortunately, the results are not homogenous and are hardly convincing.
- [27](#) This type of sarcophagus is attested from the 19th to the early 16th centuries BC in the still unpublished graves excavated in Levels B VI to A XIV at Susa.
- [28](#) Compare the platform found in Tomb IV of the *Palais Hypogée* at Tchogha Zanbil.
- [29](#) A further incomplete skeleton of a 30–35 year old woman (?) was found next to a wall that seems to be contemporaneous with Negahban's *Tomb-Temple Complex of Tepti Ahar* (Mofidi-Nasrabadi 2012b: Tab. 4); the skeleton was progressively covered with later debris and no grave pit was noted (Mofidi-Nasrabadi 2012b: 94 and Pl. 35: 6). For a view of a great number of skeletal remains heaped up in a street *between the dwellings of the final building layer* of the town, see also www.pasthorizonspr.com/index.php/archives/11/2015/archaeologists-uncover-human-tragedy-at-ancient-elamite-site-of-haft-tappeh.
- [30](#) Older houses appeared in a small area of this level. These houses were later considered to belong to a Level ‘Pre-XV’ (Armstrong and Gasche 2014: 12 and Table 9). However, they contained no burials.
- [31](#) One should consider the following listing as approximate, as many of the houses extended beyond the limits of *Chantier A*. Furthermore, some of the numbers are slightly different from those of Gasche (2013: 77) due to a reexamination of the data.
- [32](#) These eyes did not belong to a clay head as maintained by Spycket 1992: 136, No. 85.
- [33](#) The large Level XII residence on the east side of *Chantier A* ([Figure 36.2](#)), for example, belonged to a man named Attaru-uhtuh, who was almost certainly an important Elamite notable based on the evidence of his correspondence with the *sukkalmah* (Steve *et al.* 1980: 126–127). This house rests on older Level XIII and XIV houses with a very similar

plan.

- [34](#) Pašime was formerly localized along the northeastern coast of the Gulf (Steinkeller 1982: 240–243. Vallat 1993: CXXVI–CXXVII).
- [35](#) Compare Hussein *et al.* 2010: Figures 54 and 55 with respectively Gasche 1973: Pls. 24: 21 and 11.

Bibliography

- Abdi, K. 2001. Malyan 1999. *Iran* 39: 73–98.
- Alden, J.R., Abdi, K., Azadi, A., Beckman, G. and Pittman, H. 2005. Fars Archaeology Project 2004. Excavations at Tal-e Malyan. *Iran* 43: 39–47.
- Alizadeh, A. 1985. A Tomb of the Neo-Elamite Period at Arjān, Near Behbahan. *Archaeologische Mitteilungen aus Iran* 18: 49–73.
- . 2014. Ancient Settlement Systems and Cultures in the Ram Hormuz Plain, Southwestern Iran: Excavations at Tall-e Geser and Regional Survey of the Ram Hormuz Area. *Oriental Institute Publications* 140, Chicago.
- Álvarez-Mon, J. 2005. Elamite Funerary Clay Heads. *Near Eastern Archaeology* 68/3: 114–122.
- . 2010. *The Arjan Tomb: At the Crossroads of the Elamite and the Persian Empires*. *Acta Iranica* 49, Leuven: Peeters Publishers.
- . 2013. Elam in the Iron Age. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*, New York: Oxford University Press, 457–477.
- . 2015. Arjān Tomb. *Encyclopædia Iranica* (online).
- Amiet, P. 1966. *Elam*. Auvers-sur-Oise.
- . 1973. En Iran central, la civilization du désert de Lut. *Archeologia* 60: 20–27.
- . 2002. Review of Madjidzadeh 2003a. *Revue d'assyriologie et d'archéologie orientale* 96: 95–96.
- Armstrong, J.A. and Gasche, H. 2014. *Mesopotamian Pottery: A Guide to the Babylonian Tradition in the Second Millennium B.C. Mesopotamian History and Environment. Memoirs* VI. Ghent, Chicago.
- Azadi, A., Ascalone, E. and Peyronel, L. 2012. The First Season (2009) of Archaeological Research by the Iranian-Italian Joint Expedition at Qaleh Kutcheh, Halil Valley (Jiroft, Kerman Province, SE Iran). In: Matthews, R. and Curtis, J. (eds.) *Proceedings of the 7th International Congress on the Archaeology of the Ancient Near East: 12 April-16 April 2010, The British Museum and UCL, London 3: Field Work & Recent Research*, Wiesbaden: Harrassowitz Verlag, 277–302.
- Badamchi, H. 2015. Water Reservoir in Chogha Zanbil and its Epigraphic Evidence. *Elamica* 5: 1–3.
- Beech, M., Strutt, K., Blue, L., Khalfan al-Kaabi, A., Awad Omar, W., Abdulla al-Haj El-Faki, A., Reddy Lingareddy, A. and Martin, J. 2016. Ubaid-Related Sites of the Southern Gulf Revisited: The Abu Dhabi Coastal Heritage Initiative. *Proceedings of the Seminar for Arabian Studies* 46: 9–23.
- Caldwell, J.R. 1957–1971. Ghazir, Tell-i. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 3: 348–355.
- Carter, E. 1971. *Elam in the Second Millenium B.C.: The Archaeological Evidence*. Chicago: PhD Diss., University of Chicago.
- . 1979. Elamite Pottery, ca. 2000–1000 B.C. *Journal of Near Eastern Studies* 38: 111–128.
- . 1994. Bridging the Gap Between the Elamites and the Persians in Southeastern Khuzistan. *Achaemenid History* 8: 65–

- . 1996. *Excavations at Anshan (Tal-e Malyan): The Middle Elamite Period. Malyan Excavations Reports 2. University Museum Monograph 82*. Philadelphia, PA.
- Cole, S.W. and De Meyer, L. 1999. Tepti-aḫar, King of Susa, and Kadašman-^dkur.gal. *Akkadica* 112: 44–45.
- Cole, S.W. and Gasche, H. 2007. Documentary and Other Archaeological and Environmental Evidence Bearing on the Identification and Location of the Rivers of Lower Khuzestan and the Position of the Head of the Persian Gulf ca. 1200 BC – 200 AD. *Akkadica* 128: 1–72.
- Cleuziou, S. 2003. Jiroft et Tarut. Plateau iranien et péninsule arabique. *Les dossiers d'archéologie* 287: 114–125.
- Delougaz, P. and Kantor, H.J. (A. Alizadeh ed.) 1996. *Chogha Mish 1. The First Five Seasons of Excavations 1961–1971. Oriental Institute Publications 101*. Chicago (2 vol.).
- Desset, F. 2014. A New Writing System Discovered in 3rd Millennium BC E Iran: The Konar Sandal 'Geometric' Tablets. *Iranica Antiqua* 49: 83–109.
- Duchêne, J. 1986. La localisation de Huhnur. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta Historiae Elamicae. Mélanges offerts à M.-J. Steve*. Paris: Editions Recherches sur les Civilisations, 65–74.
- During Caspers, E.C.L. 1971. New Archaeological Evidence for Maritime Trade in the Persian Gulf during the Late Protoliterate Period. *East and West* 21: 21–44.
- Dyson, Jr., R.H. 1987. The Relative and Absolute Chronology of Hissar II and the Proto-Elamite Horizon of Northern Iran. *BAR International Series 379 (ii)*. Oxford: 647–678.
- Ferembach, D. 1968. Le squelette du XIII^e siècle avant notre ère de la tombe royale de Tchoga Zanbil près de Suse (Iran). *Mémoires de la Délégation archéologique en Iran* 40. Paris: Librairie orientaliste Paul Geuthner, 127–144.
- Gasche, H. 1973. *La poterie élamite du deuxième millénaire a.C. Mémoires de la Délégation archéologique en Iran* 47. Leiden, Paris: Brill.
- . 1989. *La Babylonie au 17^e siècle avant notre ère: approche archéologique, problèmes et perspectives. Mesopotamian History and Environment. Memoirs I*. Ghent.
- . 2013. Transferts culturels de la Babylonie vers Suse au milieu du 2^e millénaire av. n. ère. *Mémoires de la Délégation en Perse* 58. Leiden, Boston: Brill, 71–82.
- Gasche, H., Armstrong, J.A., Cole, S.W. and Gruzadyan, V.G. 1998. *Dating the Fall of Babylon. A Reappraisal of Second-Millennium Chronology. Mesopotamian History and Environment. Memoirs IV*. Ghent, Chicago.
- Gaube, H. 2011. Arrajān. *Encyclopædia Iranica* (online).
- Gautier, J.-E. and Lampre, G. 1905. *Fouilles de Moussian. Mémoires de la Délégation en Perse* 8. Paris: Ernest Leroux éditeur, 59–148.
- Ghirshman, R. 1964. Suse. Campagne de fouilles 1962–1963. Rapport préliminaire. *Arts Asiatiques* 10: 3–20.
- . 1965. Suse du temps des *sukkalmah*. Campagne de fouilles 1963–1964. Rapport préliminaire. *Arts Asiatiques* 11: 3–21.
- . 1968a. *Tchoga Zanbil (Dur-Untash) II: Temenos, temples, palais, tombes. Mémoires de la Délégation archéologique en Iran* 40. Paris: Librairie orientaliste Paul Geuthner.
- . 1968b. Suse au tournant du III^e au II^e millénaire avant notre ère. Travaux de la Délégation archéologique en Iran – Hiver 1966–1967. Rapport préliminaire. *Arts Asiatiques* 17: 3–44.

- Grillot, F. and Vallat, F. 1978. Le verbe élamite “pi(š)ši”. *Cahiers de la Délégation archéologique française en Iran* 8: 81–84.
- Hakemi, A. 1969. Etudes archéologiques de la lisière du désert de Lout. *Bastan Chenassi va Honar-e Iran* 2: 4–25.
- . 1970. Shāhdad. *Iran* 8: 187–188.
- . 1986. Les maquettes de Shahdad: modèles de bâtiments sacrés du troisième millénaire. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta Historiae Elamicae. Mélanges offerts à M.-J. Steve*, Paris: Editions Recherches sur les Civilisations, 45–49.
- . 1997. Shahdad. Archaeological Excavations of a Bronze Age Center in Iran. *Istituto Italiano per il Medio ed Estremo Oriente. Centro Scavi e Ricerche Archeologiche. Reports and Memoirs* 25. Rome.
- Hansman, J. 1972. Elamites, Achaemenians and Anshan. *Iran* 10: 101–124.
- Henkelman, W.F.M. 2008. *The Other Gods who are: Studies in Elamite-Iranian Acculturation Based on the Persepolis Fortification Texts. Achaemenid History* 14. Leiden: Nederlands Instituut voor het Nahije Oosten.
- Hessari, M. 2011. New Evidence of the Emergence of Complex Societies Discovered on the Central Iranian Plateau. *Iranian Journal of Archaeological Studies* 1/2: 35–48.
- Hussein, A.M., Hamza, H.A., Thaher, A.K., Kadhum, S.J., Hashem, M., Taha, H.M., Altaweel, M.R. and Studevent-Hickman, B. 2010. Tell Abu Sheeja/Ancient Pašime: Report on the First Season of Excavations, 2007. *Akkadica* 131: 47–103.
- Hussein, M.M. 2016. *Nimrud: The Queen's Tombs*. Translation and initial editing by Mark Altaweel, editing and additional notes by McGuire Gibson. Chicago: A Joint Publication of the Iraqi State Board of Antiquities and Heritage, Baghdad and the Oriental Institute of the University of Chicago.
- Jafari, M.J. 2013. Report of the Third Season of Archaeological Excavation at Lama Cemetery, Iran. *Journal of Iranian Archaeology* 4: 58–77.
- König, F.W. 1977. *Die elamischen Königsinschriften. Archiv für Orientforschung Beiheft* 16. Osnabrück: Biblio Verlag.
- Lamberg-Karlovsky, C.C. 1970. Excavations at Tepe Yahya, Iran 1967–1969: Progress Report I. *American School of Prehistoric Research, Bulletin* 7. *The Asia Institute of Pahlavi University Monograph* 1. Cambridge MA.
- Le Brun, A. and Vallat, F. 1978. L'origine de l'écriture à Suse. *Cahiers de la Délégation archéologique française en Iran* 8: 11–59.
- Madjidzadeh, Y. 1976. The Land of Aratta. *Journal of Near Eastern Studies* 35: 105–113.
- . 2003a. *Jiroft. The Earliest Oriental Civilization*. Tehran: Iran National Library.
- . 2003b. La première campagne de fouilles à Jiroft dans le bassin du Halil Roud (janvier et février 2003). *Les dossiers d'archéologie* 287: 65–75.
- Madjidzadeh, Y. and Pittman, H. 2008. Excavations at Konar Sandal in the Region of Jiroft in the Halil Basin. First Preliminary Report (2002–2008). *Iran* 46: 69–103.
- McCown, D.E. 1949. The Iranian Project. *American Journal of Archaeology* 53: 54.
- Mecquenem de, R. 1922. Fouilles de Suse. Campagnes des années 1914–1921–1922. *Revue d'assyriologie et d'archéologie orientale* 19: 109–140.
- . 1934. Fouilles de Suse 1929–1933: Ville Royale. *Mémoires de la Mission archéologique de Perse* 25. Paris: Librairie Ernest Leroux, 177–237.
- . 1943. Fouilles de Suse, 1933–1939. *Mémoires de la Mission archéologique en Iran* 29. Paris: Presses Universitaires de

France, 3–161.

- Mecquenem de, R. and Michalon, J. 1953. *Recherches à Tchogha Zembil. Mémoires de la Mission archéologique en Iran* 33. Paris: Presses Universitaires de France.
- Miroschedji de, P. 1973. Vases et objets en stéatite susiens du Musée du Louvre. *Cahiers de la Délégation archéologique française en Iran* 3: 9–79.
- . 1974. Tépé Jalyan, une nécropole du III^e millénaire av. J.-C. au Fars oriental (Iran). *Arts asiatiques* 30: 19–64.
- . 1981a. Observations dans les couches néo-élamites du tell de la Ville Royale à Suse. *Cahiers de la Délégation archéologique française en Iran* 12: 143–167.
- . 1981b. Prospection archéologiques au Khuzistan en 1977. *Cahiers de la Délégation archéologique française en Iran* 12: 169–192.
- . 1986. La localisation de Madaktu et l'organisation politique de l'Elam à l'époque néo-élamite. In: De Meyer, L., Gasche, H. and Vallat, F. (eds.) *Fragmenta Historiae Elamicae. Mélanges offerts à M.-J. Steve*. Paris: Editions Recherches sur les Civilisations, 209–225.
- . 2003. Susa and the Highlands: Major Trends in the History of Elamite Civilization. In: Miller, N.F. and Abdi, K. (eds.) *Yeki Bud, Yeki Nabud: Essays on the Archaeology of Iran in Honor of William M. Sumner* Monograph Series 48. Los Angeles, Cotsen Institute of Archaeology at UCLA, 16–38.
- Mofidi-Nasrabadi, B. 2005. Eine Steininschrift des Amar-Suena aus Tappeh Bormi (Iran). *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 95: 161–171.
- . 2007. *Archäologische Ausgrabungen und Untersuchungen in Čogā Zanbil*. Münster: Agenda Verlag.
- . 2010a. *Vorbericht der archäologischen Ausgrabungen der Kampagnen 2005–2007 in Haft Tappeh (Iran)*, Münster: Agenda Verlag.
- . 2010b. Herrschaftstitulatur der Könige von Susa und Anšan. *Akkadica* 131: 109–119.
- . 2011. The Grave of a *puhu-teppu* from Haft Tappeh. *Akkadica* 132: 151–161.
- . 2012a. The Spatial Order in the Tomb Buildings of the Middle Elamite Period. In: Pfälzner, P., Nier, H., Pernicka, E. and Wissing, A. (eds.) *(Re-)Constructing Funerary Rituals in the Ancient Near East. Proceedings of the First International Symposium of the Tübingen Post-Graduate School "Symbols of the Dead" in May 2009. Qatna Studien Supplementa. Übergreifende und vergleichende Forschungsaktivitäten des Qatna-Projekts der Universität Tübingen* 1. Wiesbaden: Harrassowitz Verlag, 261–270.
- . 2012b. Vorbericht der archäologischen Ausgrabungen der Kampagnen 2008–2010 in Haft Tappeh (Iran). *Elamica* 2: 55–115, 41 plates and 1 plan.
- . 2013. Neue archäologische Untersuchungen in Dehno, Khuzestan (April–Mai 2012). *Elamica* 3: 89–132.
- . 2014. Vorbericht der archäologischen Ausgrabungen der Kampagnen 2012–2013 in Haft Tappeh (Iran). *Elamica* 4: 67–168.
- . 2015. Ergebnisse der C14-Datierung der Proben aus Haft Tappeh. *Elamica* 5: 7–36.
- Muscarella, O.W. 2001. Jiroft and "Jiroft-Aratta". A Review Article of Yousef Madjidzadeh, Jiroft: The Earliest Oriental Civilization. *Bulletin of the Asia Institute New Series* 15: 173–198.
- Negahban, E.O. 1969. Haft Tepe. *Iran* 7: 173–177.

- . 1991. *Excavations at Haft Tepe, Iran. University Museum Monograph* 70. Philadelphia, PA: The University Museum of Archaeology and Anthropology.
- Nicholas, I.M. 1990. *The Proto-Elamite Settlement at TUV. Malyan Excavations Reports* 1. *University Museum Monograph* 69. Philadelphia, PA: The University Museum of Archaeology and Anthropology.
- Perkins, A. 1949. Archaeological News. *American Journal of Archaeology* 53: 36–57.
- Perrot, J. 2003. L'iconographie de Jiroft. *Les dossiers d'archéologie* 287: 96–113.
- Perrot, J. and Madjidzadeh, Y. 2005. L'iconographie des vases et objets en chlorite de Jiroft (Iran). *Paléorient* 31/2: 123–152.
- Pézard, M. 1914. *Mission à Bender-Bouchir. Documents archéologiques et épigraphiques. Publications de la Mission Archéologique de Perse* 15. Paris: Ernest Leroux éditeur.
- Pittman, H. 1984. *Art of the Bronze Age: Southeastern Iran, Western Central Asia, and the Indus Valley*. New York: The Metropolitan Museum of Art.
- Porada, E. 1970. *Tchoga Zanbil (Dur-Untash) IV: La glyptique. Mémoires de la Délégation archéologique en Iran* 42. Paris: Librairie orientaliste Paul Geuthner.
- Potts, D.T. 2001. *Excavations at Tepe Yahya, Iran 1967–1975: The Third Millennium. American School of Prehistoric Research Bulletin* 45. Cambridge, MA: Peabody Museum of Archaeology and Ethnology, Harvard University.
- Potts, D.T. and Roustaei, K. (eds.) 2006. *The Mamasani Archaeological Project Stage One. A Report on the First two Seasons of the ICAR – University of Sydney Expedition to the Mamasani District, Fars Province, Iran*. Tehran.
- Potts, D.T., Roustaei, K., Petrie, C.A. and Weeks, L.R. (eds.) 2009. *The Mamasani Archaeological Project Stage One. A Report on the First two Seasons of the ICAR – University of Sydney Expedition to the Mamasani District, Fars Province, Iran. BAR International Series* 2044. Oxford.
- Rad, B. 1969–1970. Prospections archéologiques dans le littoral du Golfe Persique et les îles. *Bastan Chenassi va Honar-e Iran* 4: 17–18.
- Reiner, E. 1970. Légendes des cylindres. *Mémoires de la Délégation archéologique en Iran* 42: 133–137.
- . 1973a. The Location of Anšan. *Revue d'assyriologie et d'archéologie orientale* 67: 57–62.
- . 1973b. Inscription from a Royal Elamite Tomb. *Archiv für Orientforschung* 24: 87–102.
- Rezvani, H., Roustaei, K., Azadi, A. and Ghezlbash, E. 2007. *Final Report of the Archaeological Excavations at Lamā Cemetery. Yasudj-Kohgilouye va Boyer Ahmad. Archaeological Report Monograph Series* 12. Tehran: Iranian Center for Archaeological Research (in Persian with an English abstract).
- Rice, M. 1994. *The Archaeology of the Arabian Gulf c. 5000–323 BC*. London, New York: Routledge.
- Schacht, R.M. 1975. A Preliminary Report on the Excavations at Tepe Sharafabad, 1971. *Journal of Field Archaeology* 2: 307–329.
- Schacht, R.M. and Wright, H.T. 2010. Šarafābād. *Encyclopædia Iranica* (online).
- Scheil, V. 1900. *Textes élamites-sémitiques. Première série, Délégation en Perse. Mémoires* 2. Paris: Ernest Leroux éditeur.
- . 1905. *Textes élamites-sémitiques. Troisième série, Délégation en Perse. Mémoires* 6. Paris: Ernest Leroux éditeur.
- . 1908. *Textes élamites-sémitiques. Quatrième série, Délégation en Perse. Mémoires* 10. Paris: Ernest Leroux éditeur.
- . 1923. *Textes de comptabilité proto-élamites (Nouvelle série), Mémoires de la Mission archéologique de Perse* 17. Paris: Ernest Leroux éditeur.

- . 1935. *Textes de comptabilité proto-élamites. Troisième série*, Mémoires de la Mission archéologique de Perse 26. Paris: Ernest Leroux éditeur.
- Shishegar, A. 2015. Tomb of the Two Elamite Princesses of the House of King Shutur-Nahunte Son of Indada [in Persian with English summary]. Tehran: Cultural Heritage, Handcrafts and Tourism Organization.
- Spycket, A. 1992. Funerary Heads. In: Harper, P.O., Aruz, J. and Tallon, F. (eds.) *The Royal City of Susa. Ancient Near Eastern Treasures in the Louvre*. New York, 135–136.
- Stein, A. 1936. An Archaeological Tour in the Ancient Persia. *Iraq* 3: 111–225.
- Steinkeller, P. 1982. The Question of Marhaši: A Contribution to the Historical Geography of Iran in the Third Millennium BC. *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 72: 237–265.
- . 2006. New Light on Marhaši and its Contacts with Makkan and Babylonia. *Journal of Magan Studies* 1: 1–17.
- Steve, M.-J. 1967. *Textes élamites et accadiens de Tchogha Zanbil*, Mémoires de la Délégation archéologique en Iran 41. Paris: Librairie orientaliste Paul Geuthner.
- . 1987. *Nouveaux mélanges épigraphiques. Inscriptions royales de Suse et de la Susiane. Mémoires de la Délégation archéologique en Iran* 43. Nice: Editions Serre.
- Steve, M.-J. and Gasche, H. 1990. Le Tell de l'Apadana avant les Achéménides. Contribution à la topographie de Suse. In: Vallat, F. (ed.) *Contribution à l'histoire de l'Iran. Mélanges offerts à Jean Perrot*. Paris: Editions Recherches sur les Civilisations, 15–60.
- . 1996. L'accès à l'Au-delà, à Suse. In: Gasche, H. and Hrouda, B. (eds.) *Collectanea Orientalia. Histoire, arts de l'espace et industrie de la terre. Etudes offertes en hommage à Agnès Spycket*, Civilisations du Proche-Orient. Série I. Archéologie et Environnement 3. Neuchâtel, Paris, 329–348.
- Steve, M.-J., Gasche, H. and De Meyer, L. 1980. La Susiane au deuxième millénaire: à propos d'une interprétation des fouilles de Suse. *Iranica Antiqua* 15: 49–154.
- Steve, M.-J., Vallat, F., Gasche, H. and Jullien, C.F. 2002–2003. Suse. *Supplément au Dictionnaire de la Bible* 73–74: 359–652.
- Stone, E.C. 1977. Economic Crisis and Social Upheaval in Old Babylonian Nippur. In: Levine D. and Young, T.C. Jr. (eds.) *Mountains and Lowlands: Essays in the Archaeology of Greater Mesopotamia, Bibliotheca Mesopotamica* 7. Malibu: Undena Publications, 267–289.
- Sumner, W.M. 1987–1990. Maljān, Tall-e. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 7: 306–320.
- Tavernier, J. 2013. Elamite and Old Iranian Afterlife Concepts. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam: Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress held at Ghent University, December 14–17, 2009*, Mémoires de la Délégation en Perse 58. Leiden, Boston, MA: Brill, 471–489.
- Tawhidi, F. and Khalilian, A.-M. 1982. Gozāreš-e barrasi-e ašyā'-e ārāmghāh-e Arjān, Behbahān. *Aṭar* 7–9: 233–286.
- Vallat, F. 1981. Un fragment de brique de Tepe Bormi inscrit en élamite. *Cahiers de la Délégation archéologique française en Iran* 12: 193–196.
- . 1984. Kidin-Hutran et l'époque néo-élamite. *Akkadica* 37: 1–17.
- . 1993. *Les noms géographiques des sources suso-élamites*, Répertoire Géographique des Textes Cunéiformes 11. Wiesbaden: Dr. Ludwig Reichert Verlag.
- . 2003. Un fragment de tablette proto-élamite découvert à Ozbaki, au nord-ouest de Téhéran. *Akkadica* 124: 229–231.

- Vidale, M. 2008. Šahdād. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 11: 535–537.
- Wicks, Y. 2015. *Bronze 'Bathtub' Coffins in the Context of 8th-6th Century BC Babylonian, Assyrian and Elamite Funerary Practices*. Oxford: Archaeopress Archaeology.
- Wright, H.T. (ed.) 1981. *An Early Town on the Deh Loran Plain: Excavations at Tepe Farukhabad*, Memoirs of the Museum of Anthropology, University of Michigan 13. Ann Arbor, MI.
- Wright, H.T. and Carter, E. 2003. Archaeological Survey on the Western Ram Hormuz Plain. In: Miller, N.F. and K. Abdi (eds.) *Yeki bud, yeki nabud: Essays on the Archaeology of Iran in Honor of William M. Sumner*, Monograph Series 48. Los Angeles: Cotsen Institute of Archaeology at UCLA, 60–82.

CHAPTER THIRTY-SEVEN

Women of Elam



Aurelie Daems

Introduction

The discussion of women in the Elamite world is a potentially charged one. The areas and eras under consideration are vast, the evidence is relatively scarce, and the focus is traditionally placed on royal imagery and texts. This chapter attempts to present a *status quaestionis* of certain aspects of women in Elam and raise hitherto unprecedented questions, hoping to open new avenues for future research into Elamite women. Direct evidence in the form of artistic and textual remains are adduced, as well as indirect evidence such as the remains of household activities and even craft specialization, which may give insights into aspects of women's activities within Elam.

What has been excavated and researched is not always an accurate reflection of times past but rather of the selective focus of investigation. In the case of Elam, discourses have centered on royal lineages, elite and divine residences, sumptuous statuary, and monumental rock reliefs, and they have generally failed to speak of the participation of women in society. On the rare occasions that they do, they tend to favor an extremely small percentage of the population – the mothers, wives, sisters, and daughters of the royal houses who pedestalled the kingly grandeur of Elam – hindering the formation of a more holistic picture. The largest portion of the female population would have been engaged in mundane, religious, ritual and festive activities that confirmed or (re)negotiated their gendered roles. As well as the traditional “female” tasks of nursing and childrearing, their roles would have extended far beyond to activities such as tending animals, harvesting crops, milling grain, preparing food, spinning, weaving textiles and baskets, making jewelry, processing ceramics, and perhaps trading these goods. Potentially they had even been engaged in activities generally associated with men, such as scribal work and other specialized crafts. The relative poverty of our knowledge about the lives of Elamite women is an imbalance that future research should attempt to redress.

Naked women

Imagery of Elamite women, ranging from small statuettes to large rock-cut reliefs, offers a valuable source of direct evidence for their study. Yet the depicted women remain largely mute since, with the occasional royal or elite exception, we cannot connect them with contemporary texts or inscriptions, or to their specific role or purpose. At best their posture and dress inform us of the fashion that was ascribed to them or favored throughout the Elamite period.

By far the majority of female Elamite imagery is represented by the small, portable, and easily disposed of, naked, semi-dressed, or fully adorned figurines found in the urban centers of Susa, Anshan, Dur-Untash-Napirisha, and Kabnak (Daems 2005). From the Old-Elamite through to the Middle-Elamite period, there was a large and increasing production of these statuettes, first by hand and later, from the Shimashki period onwards, via a single and double mold (Spycket 1986: 80). Most of these figurines were found littering the streets of Susa (Ghirshman 1968b), near the temple of Inshushinak (Amiet 1966: 424, Figure 322), or close to the temple dedicated to the Elamite goddess Pinikir at Dur-Untash-Napirisha (Orthmann 1975: Figure 22, Spycket 1992: Pl. 157, Figure 1374–1375 and Ghirshman 1968b: Pl. VIII, Figure 4–5). Occasionally at Susa they were found inside a child's grave of undetermined sex (Spycket 1992: Pl. 25: 140). Naked or semi-naked female statuettes were found by the hundreds, but the debate concerning their possible meaning remains open. It is certain, however, that the clasping of the hands together in front of the stomach or at chest height seen on these and the dressed statuettes is a gesture of respect or worship commonly depicted in the Elamite world. We will see this gesture continuing right through to the Neo-Elamite period, especially in rock relief carvings (below).

The earlier hand-made images of naked women were tubular, meant to stand upright, and received detailing recto and verso. It appears that the shaping of a “female concept” was more important in the production of these figurines than the rendering of a realistic “femininity”, if such a concept had existed. Once the mold was introduced, they became flatter and two-dimensional, with increasing details accentuating their femininity. The rendering of bodily and facial features evolved from the use of plain incisions, gashes, and punctures to mark mouths, navels, buttocks, pubic triangle, and legs in an archaic fashion, towards more refined applications of sometimes painted bands and pellets of incised clay representing earrings, bracelets, and braids of hair twisted around the head (Sumner 1974: 170–171, Figure 11g, I, m, p). Also represented were necklaces covering a large part of an otherwise bare torso (Spycket 1992: Pl. 25: 140), or embroidered and geometrically decorated caps that protected or enhanced the hairdo (Spycket 1992: Pl. 122, Figure 1057). On some of the naked figurines, a clay belt is laced around the breasts and crossed at the back. This *baudrier*, as it is often referred to (Spycket 1992: Pl. 22: 128), is a type of *brassière* that could have been made from textile or

leather straps and appears in Susa during the Shimaski period, but is attested in neighboring southern Mesopotamia since the Ubaid period (Daems 2010). The most highly elaborated naked and semi-naked female figurines date from the Middle Elamite period, when lavishly molded images of women who cup their breasts and at times have overly exaggerated thighs were produced (e.g., Figure 37.1b-d) (e.g., Spycket 1992: Pl. 129, Figure 1130–1133). After this, the production of naked Elamite female figurines appears to reduce substantially in number.



Figure 37.1 [\[a\] clay funerary head from Susa; \[b-d\] naked female terracotta figurines from Susa \(photographs by J. Álvarez-Mon\).](#)

Dressing up the Elamite way

Similarly dressed statuettes of women inform us on the ways Elamite women clothed and adorned themselves. Some exceptions left aside, conservatism in fashion prevails. The female statuettes found in the larger centers show that some women dressed in relatively delicate and at times elaborately produced fabrics (e.g., Spycket 1992: Pl. 132, Figure 1158–1160). Throughout the Elamite period, there are at least five rather standard types of clothes worn by women. These may have been markers of status, age, or gender, or indicate participation in festive, religious, or mundane activities. The kaunakes dress or *crinoline*, known from 3rd millennium Mesopotamia through to the Bactria-Margiana sphere (Ghirshman 1963: Figure 1), was the most depicted type of dress from the Proto-Elamite through to the Sukkalmah period (e.g., Spycket 1992: Pl. 131, Figure 1144–1147). This woolen, cloak-like garment displayed patterns of horizontal stripes and tongues, was worn by men, women, and gods alike, and is referenced on many statuettes and seals.

From the Shimashki to the Middle Elamite period, women also wore fabrics in the shape of fine, sometimes dotted shirts (Negahban 1991: Pl. 26, Figure 184) and wraparound skirts with decorated heavy hems covering a larger skirt underneath (Spycket 1992: Pl. 132, Figures 1158–1165). Women are also shown wearing short-sleeved long dresses with dotted motives and borders enhanced with geometrical designs (Spycket 1992: Pl. 156, Figure 1370), and they often wear necklaces with a pendant resting on their chest (e.g., Spycket 1992: Pl. 132, Figures 1158–1184). The rendering of dots on clothing from the Shimashki period onwards is a phenomenon that seems exclusively Elamite: no similar Mesopotamian garment is known (e.g., Figure 37.2c) (Pittman 2003: 180). A very sumptuous dress, perhaps restricted to elite Elamite women because it was recovered on a single shell statuette from Susa ([Figure 37.2b](#)), is known from the Sukkalmah-period. It consists of one long, amply decorated shawl covering the whole body, and partly draped under the arms and shoulders (Harper 1992: 95, Figure 59). The neck and wrists are adorned with necklaces and bangles, and thick carvings around the elbows and from the nape of the neck to the back of the legs, suggest this statuette was inlaid with material representing additional jewelry that is now lost. Several Middle Elamite clay figurines from Susa display this type of necklace, which runs along the back of the body (Spycket 1992: Pl. 137, Figure 1205–1206) and seems to be a strictly female accessory.

From the Middle to the Neo-Elamite period, women and men sometimes wore shawls with large fringes over the shoulders, crossing at the chest to form a “v” (Álvarez-Mon 2010a: 7), or they wore skirts topped by a short-sleeved shirt in the form of a bolero or cape fixed with decorative pins. Although several Elamite dress types have been discussed and described in great detail (e.g., Álvarez-Mon 2009; 2010a), it is still not clear if these fabrics were produced locally or were imported from one center to another, and whether or not Elamite women played a part in their making, sewing, dying, or trading.

Elamite hairstyles of men and women evolve over time, but like dress seem to be rather conservative. Characteristic is a visor coiffure facing outwards from the front, which is especially clear on Middle Elamite funerary heads and on Neo Elamite rock-cut reliefs connected to the elite (see below). Deducing from the many female figurines and statues, Elamite women either donned a short, pageboy-style hairdo that covered the ears (Spycket 1992: Pl. 157, Figures 1374–1375 and Ghirshman 1968b: Pl. VIII, Figures 4–5), or they braided their hair, after which they wrapped it around the head, topping the braid with a type of cap or turban affixed by a decorative band (Spycket 1992: Pl. 73: Figure M14 and Pl. 84: 719), with a frontal bulge to which a medallion-style ornament could be affixed. Facial features of Elamite women are first rendered crudely, as is visible on Proto-Elamite, possibly worshipping, alabaster statuettes (Amiet 1976: Pl. XVIII, Figures 3–4). Throughout all periods, the eyes are large and almond-shaped and during the Middle Elamite period at times accentuated through the use of pigments and paint.



[Figure 37.2 \[a\] painted clay head from Kabnak; \[b\] ivory figurine from Susa; \[c\] faience figurine from Choga Zanbil \(photographs by J. Álvarez-Mon\).](#)

Elite Elamite women

Evidence of elite women within Elamite society is by far the richest. The oldest evidence for Elamite female power or access to power comes from glyptic art. It is a seal from Akkadian-period Susa reportedly showing two women and a goddess, separated by an inscription (Amiet 1972: Pl. 153, Figure 1637). So-called Anshanite seals, named after the city of Anshan

from which they are reported to have come, carry more direct evidence for powerful women during the Shimashki and Sukkalmah periods (Carter 2014: 42). Some of the women depicted on these seals were identified as queens based on accompanying Sumerian inscriptions. One represents Ebarat I in a kaunakes dress with one bare shoulder (Carter 2014: 42) offering flowers or streams to the woman facing him, the beloved queen mentioned in the inscription (Lambert 1979: 1, Pl. V, Figure 42 E). On similar seals (Amiet 1980: 164, Figure 2c and Porada 1990: Pl. 1, n° 1a), the symbolic flowing water or another substance is again presented by the king to his consort, while on others grapevines are shown (Porada 1990: Pl. 1, no.3a-b and Carter 2014). This passing of flowers or water is believed to be connected with the conferring of power, but the images could also be interpreted as banqueting scenes taking place under a vine canopy. Still other seals (Porada 1990: Pl. II, no.4A and Figure 6) show a presumed queen with a servant, receiving a bird or a cup. All wear the kaunakes garment (Ghirshman 1963: Figure 1 and 6; Amiet 1980: Pl. III, Figure a-c), pointing towards spheres of fashion influence with the Sumerian and Bactria-Margiana world. The hairdo, however, is exclusively Elamite.

The following Middle Elamite period is a golden age for portraiture of royal and elite women, who had never before appeared so sumptuously attired. The Elamite queen most lavishly represented and subject to most attention is undoubtedly Napir-Asu, wife of king Untash-Napirisha (1340–1300 BC). Napir-Asu is the first royal woman in Elamite history portrayed on a limestone stela together with her husband (Pittman 2003: Figure 15.6), and on a freestanding massive bronze sculpture (Harper 1992: 132–135). She seems also to be the first Elamite queen whose name is inscribed on her body. On the stela, unearthed on Susa's acropolis but originally commissioned for Dur-Untash-Napirisha, are four registers, the second of which shows the remains of two women and one man, identified through an inscription as Untash-Napirisha. The stela illustrates the royal power bestowed by the Elamite god Inshushinak upon the king. He is joined by his wife Napir-Asu and faces his mother, priestess Utik, both of whom are identified by an inscription on their arm. The women clasp their hands on their stomach while the king holds his arms upwards. Both are typical Elamite gestures of respect or prayer connected with religion and investiture (Herbin 2015).

The hitherto unparalleled, freestanding, life-size bronze statue of Napir-Asu was unearthed on the Acropolis of Susa, inside Ninhursag's temple (Harper 1992: 134). It stands 1.29 m tall, was made in the lost-wax technique, and has a bronze and tin core and a nearly pure copper and tin skin (Meyers 2000; Helwing, Chapter 7 in this volume). The head and left arm were lost in antiquity. An inscription identifies the queen, informs us as to the reason for its creation, "*to perpetuate the queen's prayer*", and gives a warning to anyone who might destroy it (Harper 1992). This, along with its careful finish, is a clear indication of the power Napir-Asu enjoyed in her time. Her garment shows the typical double dots on the shirt, while the remainder of her skirt was presumably heavily embroidered, perhaps with sewn-on golden bracteates and (semi-)precious stones (see e.g., Pittman 2003 and Harper 1992). The use of

bracteates was reserved for garments of the Elamite elite. From the 2nd millennium onwards, intricate needlework was used to embroider elite robes and fabrics, and actual examples of (fragmentary) cotton textiles with embroidered fringes and gold bracteates have been found in a ca. 600 BC male tomb burial at Arjan (Álvarez-Mon 2010a; 2010b) and cotton textiles and over 1,500 gold bracteates in the contemporary tomb of two women at Jubaji, near Ram Hormuz (Shishegar 2015). Only rarely are children of royal descent represented within Elam, let alone a daughter. The most cited example is on a blue chalcedony pebble carved with an image of the enthroned king Shilhak-Inshushinak (12th century BC) presenting what appears to be the pebble itself to his daughter Bar-Uli, who is identified by the accompanying inscription (Amiet 1966: 445).

A distinctive feature of elite Elamite artistic production are clay portraits in the round referred to as funerary heads (e.g., Spycket 1992: Pl. 136, Figure 1204). The earliest examples come from Sukkalmah-period vaulted collective tombs in the Ville Royal at Susa (Carter 2014: 46), but their production climaxed during the Middle Elamite 12th–11th centuries BC (Álvarez-Mon 2005: 114). One from Kabnak may even have represented the queen of king Tepti Ahar ([Figure 37.2a](#)) (Negahban 1991: Pl. 24, Figure 169), or other members of the Elamite ruling class (Álvarez-Mon 2005: 115). Twenty-seven male and female heads of highly individualized appearance are known so far (see Álvarez-Mon, Chapter 30 in this volume). A number of these were found next to or on top of the deceased's skull and have been interpreted as effigies of the deceased or as family members watching over them (e.g., Figure 37.1a) (Álvarez-Mon 2005: 114). Carter (2010: 49) suggests they may have been carried on poles during a funerary rite, symbolizing the deceased when he or she entered the last resting place in a burial rite that comprised several stages. The most recent examples are from ca. 8th–7th century BC Susa (Álvarez-Mon 2005: 120; Amiet 1966: 489, Figure 367), and although they follow the fashions of the Middle Elamite period, they are more crudely finished and severely eroded, perhaps heralding some decline in Elamite artistry.

By far, the grandest displays of power are found in the monumental Elamite carved-rock reliefs. Several reliefs in Fars and Izeh-Malamir display men and women of royal lineage. A relief from Naqs-I Rostam, later usurped by a Sassanian carving, is dated by various authors from the 9th to 7th century BC (Álvarez-Mon 2009: 150) and shows a presumed royal couple in procession before a pair of seated gods. Nothing is known about the couple's identity, but the remaining head of the woman is most certainly that of a queen. She wears a crenellated, mural crown referencing royal Assyrian examples, which may symbolize an actual city, perhaps Anshan (Álvarez-Mon 2010a: 10). At Shikaf-i Salman, two Middle Elamite reliefs show a king with his wife, and a child standing between them (one shown in [Figure 37.3a](#)) (Vanden Berghe 1983: 22–39, Pl. XXIII–XXIV).

An intriguing banquet scene is found in the partially broken 8th–7th century bitumen plaque from Susa known as *la fileuse* ([Figure 37.3b](#)) (Connau & Dechesne 1996: 227). It

portrays a seated young woman of high rank fanned by a servant standing behind her. The *fileuse*, so named because of the spool of thread she holds in her hands, wears her hair in the Elamite fashion and a dress draped around her body, covered by a shawl in a similar fashion to contemporary Urartian women (Kellner 1991: 160–161, Figure 17). A probable deity or royal personage once faced her, though this part of the relief was broken away leaving only the lower front portion of their kaunakes garment (Álvarez-Mon 2010a: 12). In between these figures, a dish holding fish and vegetables rests on a small table.



[a]



[b]

Figure 37.3 [a] Shikaft-i Salman rock relief depicting Elamite royal family; [b] *la fileuse* bitumen relief (photographs by J. Álvarez-Mon).

Neo-Elamite elite women are also attested in the Neo-Assyrian kingdom. In the 7th century the Assyrian king Assurbanipal rejoiced in taking Elamite captives, men and women alike, to his land. For his northern palace at Nineveh, he commissioned several panels displaying his triumph over his Elamite rivals. In one he reclines at a banquet, facing an enthroned woman whom Álvarez-Mon (2009: 147) suggested could be a captive member of the Elamite royal household. The crenellated crown and garment of the woman references late 14th century elite Elamite dress, with delicate needlework on bands of embroidered sleeves and broad fringes, along with patterns of typically Elamite plain or dotted circles (Álvarez-Mon 2009: 144, 155). This scene has suffered bouts of iconoclasm, probably as a result of retribution by later Elamite elite.

One of the last Neo-Elamite iconographic testimonials of (possible) women connected to the court is seen on the large bowl from the above-mentioned tomb at Arjan, inscribed with the name *Kidin-Hutran, son of Kurlush* (Stronach 2005: 179). It shows parallels with Phoenician and Urartian imagery, pointing towards stylistic spheres of interaction. On the outer register is a banquet scene involving a seated king with seven servants before him. Behind them stand two further servants with a different dress and hairdo, perhaps suggesting their female gender, who appear to be in charge of the beverage served. Inside the yurt-like structure behind the king (Stronach 2005: 191) could be another female servant. On the fourth register a second banquet is enlivened by music performed by two possibly female harpists who differ from their male partners; they lack a beard and have a different hairdo, covered chest and long skirt.

Women and worship

Women in worshipping poses are known as early as the Proto-Elamite period with the series of kneeling alabaster figures from Susa who clasp their hands against their mouth or chest (Harper 1992: 59, 62–63, Figs. 25 and 31 and Amiet 1976: Pl. XVIII, Figs. 1–2 and 5–6). During the Middle Elamite period at Susa, Kabnak, and Anshan, they sometimes come in the form of clay naked and dressed female figurines (see above) whose hands either clasp piously against their stomach or cup their breasts. Other contemporary figurines more directly associated with worship were discovered in the temple of Inshushinak at Susa (Amiet 1977: 449, Figure 522) and in the Pinikir temple at Dur-Untash-Napirisha, for example, two frit images of women, one of which holds a cup against the chest (Ghirshman 1968b: Pl. VII, Figure 7 and 9). A contemporary stone plaque from Susa shows a couple in a probable position of worship (Amiet 1966: 444, Figure 339). The hands are brought in front of the body of both the man and woman in a gesture seen also on late Middle-Elamite rock reliefs (Vanden Berghe 1963: Pl. XXIII).

We know from brick inscriptions from the time of king Shilhak-Inshushinak that figurines

and statuettes were produced to commemorate predecessors, secure descent, and honor family members (Carter 2014: 48). So-called *hut-halikpi* statuettes of divinities and members of the royal Elamite family were produced for the *kumpum kiduya* or exterior sanctuary and for the *suhter* or royal chapel (Carter 2014: 48). Whether these refer to the crudely shaped figurines found in their hundreds in Middle Elamite urban centers and temples is hard to ascertain. We also know from a damaged inscribed stele from Kabnak, from the time of Tepti Ahar, that women were involved in the maintenance of court buildings and cult centers and in the securing of ceremonies, religious rituals, and special festivals in which animals were slaughtered and food prepared for consumption during the *kispum*, a funeral banquet in which a priestess of Susa was involved (Potts 2004: 202; Carter 2010: 52 and Henkelman 2010: 127; Basello 2014). Contemporary inscribed bricks from Susa mention four “women of the guardians of the house” who must dress in garments fastened with strings and be locked into “the house” at night to sleep at the feet of statues of the deceased ruler and his “servant girls” until dawn (Reiner 1973: 95–96).

Activities and roles within the community

The roles taken up by women in Elamite society can be deduced in explicit and implicit ways. Thanks to seals, stelae, statues, and rock reliefs, we bear explicit witness to women in their official roles as queens. We must rely on more implicit evidence for insights into their other roles as priestesses, musicians, worshippers, mothers, wives, and so on. From the Proto-Elamite period onwards, several representations of everyday activities connected with the household are represented through seals and sealings. Although the physical distinction between men and women is not always straightforward, there are seal impressions from Susa that may show women folding large pieces of textile or weaving large threads ([Figure 37.4a](#)), preparing dung cakes for fuel (Amiet 1972: Pl. 17, Figure 666 and 674), dairy processing ([Figure 37.4b](#)), and fabricating large containers at Susa (Amiet 1972: Pl. 17, Figure 674) and at contemporary Choga Mish (Alizadeh, Delougaz and Kantor 1996: Pl. 44, Figure G). From ca. 2500–2400 BC Susa also comes a seal thought to represent a seated priestess milking a sheep and processing its milk ([Figure 37.4c](#)) (Amiet 1966: 206–207, Figure 153).

Hardly surprising is the representation of women with babies in reference to their role as mothers or wet nurses. At Susa they first appear during the Shimashki period in the form of molded images of dressed women with babies suckling their breasts. These women are seated on a clay throne, and circular pendants on their shoulders and surrounding solar disks may connect them to the religious sphere (e.g., Figure 37.5c) (e.g., Spycket 1992: Pl. 51, Figs. 365, 367, 370–372, Pl. 52, Figs. 373, 377, 379 and M 9). During the following Sukkalmah period, this motif remains (Amiet 1966: 300, Figure 224), but the baby is more detailed and occupies a larger portion of the scene. Middle Elamite Susa and Dur-Untash-Napirisha yielded the largest

sample of these images. Here the majority of women were standing and wear more elaborately decorated dresses with stripes, dots and circles. The baby is held in one hand and the other hand is held up between the breasts (e.g., Figure 37.5d) (Spycket 1992: Pl. 132, Figs. 1168–1169, Pl. 133, Figs. 1174–1175, 1181–1185). The figurines from Susa do not have a clear context, but the women-with-child from Dur-Untash-Napirisha, come from the temple of the goddess Pinikir (Ghirshman 1968b: Pl. 135, Figure 1195 and Pl. IX, Figs. 1–2).

Additionally, Elamite women may have been associated with musical instruments. From the Sukkalmah period onwards at Susa, women hold handheld drums and rattles in celebratory or festive contexts (Spycket 1992: Pl. 84, Figure 720, Pl. 85, Figure 831, Pl. 97, Figs. 823 and 825, Pl. 135, Figs. 1200–1201). In nearly every case, the woman is naked or lightly dressed and has the typical Elamite hairdo. According to Draffkorn-Kilmer (1995: 2603–2604) these were dancers who performed during prescribed sexual rites. This is difficult to confirm, but from the Sukkalmah onwards, small clay beds topped by naked women have been recovered at Susa in “the *grand bâtiment central*” believed to have been erected during the 17th century (Spycket 1992: Pl. 15, Figure 1364). In the light of the great number of containers, naked figurines and clay beds supporting a single woman ([Figure 37.5b](#)), or a woman and man engaged in a sexual act ([Figure 37.5a](#)) (Trümpelmann 1981: Pl. II, Figure B, Pl. III, Figure a-b and Spycket 1992: Pl. 102, Figure 864, Figure M 24–25, Pl. 150, Figure 1307–1308, 1321, M. 35, Pl. 151, Figure 1323, 1329, 1331, Pl. 152, Figure 1336–1337, 1339–1341, Pl. 153, Figure 1347, Pl. 154, Figure 1355, Pl. 155, Figure 1362–1363), Trümpelmann (1981: 35–44) has interpreted this area as a brothel. Important to note is that most of the figures found in this building hold their arms in a more open gesture, somewhat next to their body; not with hands clasped against the stomach in the classic pose of the period. It is certain that dance, whether in a ritualized or sexual fashion, was practiced by female dancers within Iran as early as the Late Neolithic period, as attested for instance through painted ceramics from Tepe Musian (Gautier and Lampre s.d.: 131) and Chiga Sabz (Schmidt, Curvers and van Loon 1989: Pl. 67, Figure a).

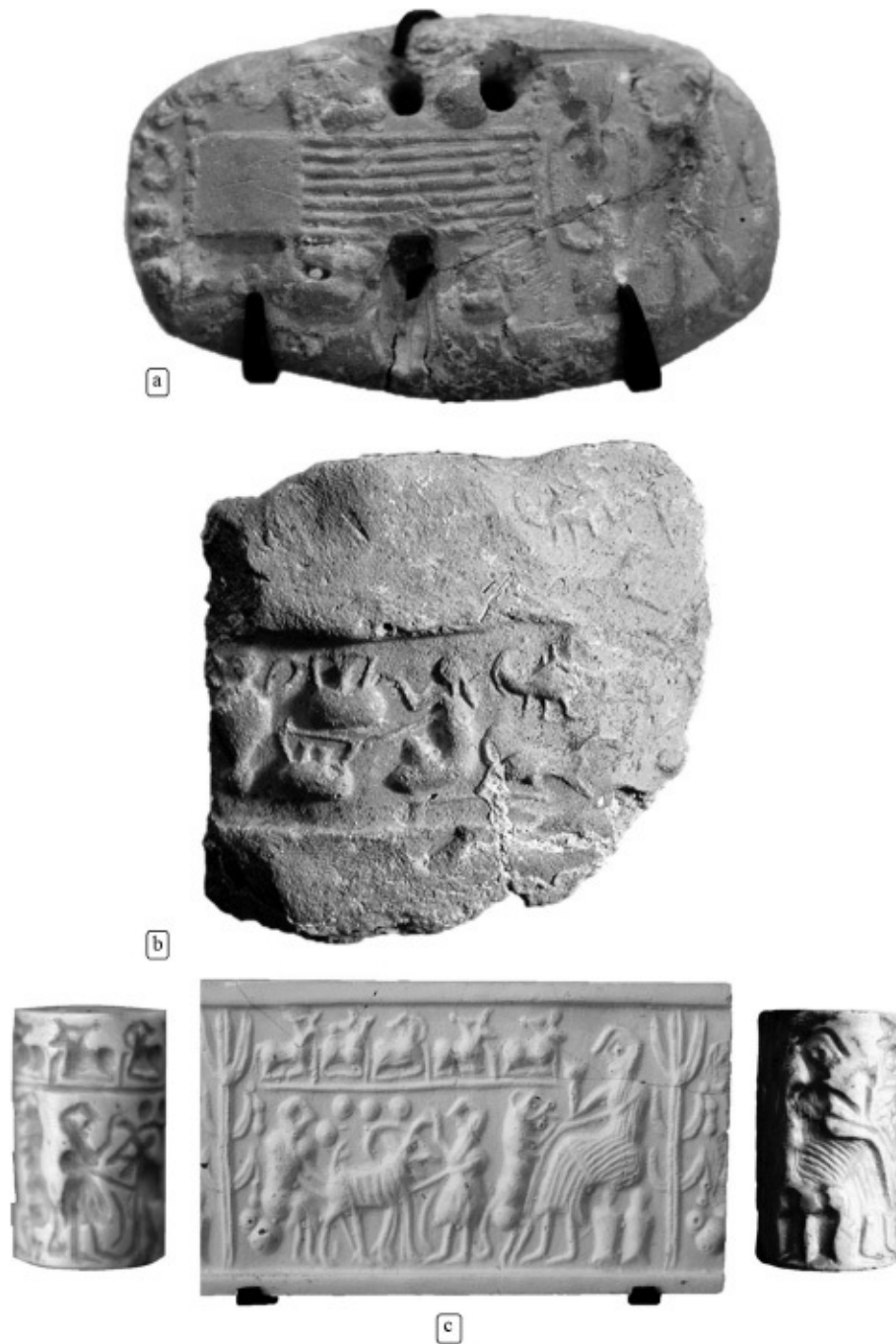


Figure 37.4 Seal and sealing images showing women partaking in everyday activities: [a] carpet weaving; [b] dairy processing; [c] milking a goat (photographs by J. Álvarez-Mon).



[Figure 37.5 Terracotta plaques and figurine: \[a\] naked couple in bed; \[b\] naked woman in bed; \[c\] seated breastfeeding woman; \[d\] standing breastfeeding woman \(photographs by J. Álvarez-Mon\).](#)

Women may have been connected with the production of woven or felted cloth, using flax, beaten fiber textile, wool, or linen (Good 2012: 337). Sumerian texts inform us of the use of Shimaskhi sheep that were trimmed for the production of fleece and woolen clothing; the earliest archaeological example coming from ca. 1800 BC Shahr-I Sokhta, which was surely in contact with the Elamite world. To produce woolen cloth and threads, horizontal looms and spindle whorls of distinct materials were used, leaving evidence in the material record. The clearest evidence for the production of woolen garments is the kaunakes dress, which was made by piled textile crafted on a loom, and which is attested in Elamite imagery. Whether

produced by pastoral nomads or city dwellers (see Good 2012: 340–341), textile manufacture required the passing of specialized knowledge from one generation to another.

Elamite women and the afterlife

The Elamite dead were usually buried in plain earthen pits, jars (usually children), or mud-brick vaults. None of these types seem to be linked to a specific gender and men and women were housed together in communal tombs. In view of the general absence of studies of skeletal remains, in most cases male and female interments can only be determined by the rather dubious method of relying on gendered grave goods. Traditionally, weapons have been equated with men and jewelry with women, but these correspondences are not always reliable (e.g., Wicks 2015). The clay funerary heads representing both males and females might reflect the gender of the deceased, but this remains uncertain. A rare example of the analysis of a skeleton in tomb IV of the *Palais hypogée* of Dur-Untash-Napirisha identified a woman aged between 40 and 60 years. She was buried with the incinerated remains of two other individuals that were interred with their personal belongings (Carter 2010: 54). As one of the few uncremated individuals at this site, it has been suggested that she may have been of foreign, presumably Kassite descent (Potts 2004: 230).

In the subsequent Neo-Elamite period, skeletal analysis identified a ca. 50-year-old woman with a white-glazed faience cylinder seal near her chest in an elite tomb (T.693) in the Ville Royale II at Susa (Miroschedji 1981). The two above-mentioned female bronze “bathtub” coffin interments in a stone-lined tomb at Jubaji were also deposited late in this period. One of the women was aged about 30–35 years old and the other around 17 years (Shishegar 2015). Their high status is overtly displayed in their luxurious grave goods, including an extraordinary collection of gold and semi-precious stone jewelry and clothing ornaments, metal, stone and glazed vessels, several tall bronze candelabra, and generous offerings of sacrificial animals and storage vessels for large quantities of commodities. Amongst the assemblages was a gold “ring” bearing the name of Shutruk Nakhunte, son of Intata (Basello 2014: 6), which may point to the royal lineage of these women.

Legal matters and jurisdictions

Some Sukkalmah-period exceptions from Susa left aside (De Graef 2010: 27), there is not much legal information available to inform us of the legal and civil status and rights of Elamite women. There is enough textual evidence, however, to show that women of the royal court or entourage had claim to significant power. When Susa was ruled by Akkadian kings, intermarriage between the Mesopotamian and Elamite elite became a means to form

diplomatic alliances and ensure peace, safe trade, and control over territory. Even more significantly, some Sukkalmah brick inscriptions hint at the status of royal women (De Graef 2015: 1), with the rise to power of rulers from lower to higher ranks legitimized through female lineage. Entitlement to the Elamite crown was justified by the claim to be the son of the sister of a preceding ruler; a filiation known in Elamite as *ruhusak* (Álvarez-Mon 2012: 748; Carter 2014: 41; De Graef 2015: 2).

Indirect evidence for Elamite women also comes from textual sources outside of the Elamite world. The deportation of Elamite civilians to the Neo-Assyrian empires is noteworthy in this respect (see also above). The Lagash tablets MVN 6 105 and 492 from the time of Gudea reveal that during the war against the Elamite king Puzur-Inshushinak, captive Elamite women and children were distributed rations of barley (Steinkeller 2012: 299), and in a much later legal document from mid-7th century-BC Assur (VAT 9755), the sale of a captive Elamite woman and her daughter are discussed (Faist 2009: 60). The woman identified as Nanaia-ila-I and her unidentified daughter were, according to the inscription, legally acquired by a scribe from a goldsmith and offered to the city of Ashur (Faist 2009: 61, fn. 12, 64). These women and others, who presumably became domestic slaves, were among the large volume of imports of Elamite population, livestock, and property brought into to the Assyrian capital. War widows were equally coveted assets for the empire (Root 2010: 452).

In several cases, tablets bear personal Elamite names (De Graef 2007: 56), but it is hard to assess if these are male or female. What we do know is that contemporary Mesopotamian law permeated part of the Elamite judicial system and must have affected Elamite women. When we compare documents from Old Babylonia with contemporary Elam, for instance, we can imagine that the concerns and contents of personal letters may have been similar within the neighboring Elamite world (De Graef 2008: 181). Letters often revolve around disputes, divorces, heritage and dowries, claims over property, personnel, cattle and field plots, deliveries, and unmet obligations. We know from Old Babylonian lawsuits, that some women of esteem, such as the *naditums* of Shamash, could bring charges against men (De Graef 2008: 186–187), but whether this was the case in Elam is unknown to me. We know that parents could reclaim a previously adopted child, or that some women could file for divorce or were accused of being disloyal and unfaithful (De Graef 2008: 189). Claims could relate to issues of property or taxes, or of improper payment or transfer of goods and marital gifts, and statements could be made by female witnesses in Sukkalmah-period Susa (De Graef 2010: 32). They could relate to men leaving their wives, as is the case for tablet MDP 23, 327, where Rabi-Inshushinak is accused by several witnesses of having left his wife. In another tablet from Susa, MDP 23, 285, written in Akkadian and also dated to the Sukkalmah period, a father is said to have offered his estate to his daughter Narubti before his death, in return asking her to provide him with food and drink during his life and to make his *kispu* offerings once he is dead (Basello 2014: 3).

Among the school tablets unearthed at Susa, there are many exercises for writing personal names (Malayeri 2013: 371). However, it is hard to fathom which of the names is female or male. When stated, most Elamite personal names are male or relate to male descent (Waters 2006: 61–63); only very rarely is a woman's name mentioned. One of these rare cases is the Sukkalmah family of Shushinak-Shemi (Sadafi 2012: 356); a local ruler who offered part of his property to his daughter in a charter (Sadafi 2012: 358, 361). Finally, a number of tablets from Neo-Elamite Susa present a corpus of typical Elamite personal names (Tavernier 2010). Potts (2004: 91) mentions personal Elamite female names on tablet DPP 230, in the context of a list of cereal rations given to “five women from Elam, probably either slaves or prisoners-of war, with the otherwise unattested names of DU-ílíl, ha-ba-ra-DU.NE, KA.A and usùr-DU10.DU10; reference to two Elamite women with typically Sumerian names, PAP.PAP-am-da-rí and dnin-gír-suur-mu, working for a brewer named Ilibeli at Lagash”.

Conclusion

The short space attributed here to women in Elam can offer only a biased and partial view. The main focus has been the presentation of a *status quaestionis* based on selected direct and indirect evidence for Elamite women, and from this it should be clear that future research needs to actively engage with far more ambitious questions to gain insights into what it meant to be a woman in Elam. Only then can we alter the discourse, from a top-down, descriptive approach centered on the elite and its iconography, to a bottom-up holistic view that does justice to the women and men alike who helped shape the Elamite world.

Bibliography

- Alizadeh, A., Delougaz, P. and Kantor, H.J. 1996. *Choga Mish. Volume I: The First Five Seasons of Excavations 1961–1971. Part II: Plates*, Oriental Institute Publications 101, Chicago.
- Álvarez-Mon, J. 2005. Elamite Funerary Clay Heads. *Near Eastern Archaeology* 68/3: 114–122.
- . 2009. Ashurbanipal's Feast: A View from Elam. *Iranica Antiqua* 44: 131–180.
- . 2010a. Elite Garments and Head-Dresses of the Late Neo-Elamite period (7th–6th Century BC). *Archäologische Mitteilungen aus Iran und Turan* 42: 1–29.
- . 2010b. *The Arjan Tomb: at the Crossroads of the Elamite and Persian Empires*. Leuven: Peeters.
- . 2012. Elam: Iran's First Empire. In: Potts, D.T. (ed.) *A Companion to the Archaeology of the Ancient Near East*, Blackwell Publishing Limited, 740–757.
- Amiet, P. 1966. *Elam*, Auvers sur Oise: Archée Editeurs.
- . 1972. *Glyptique susienne*, Mémoires de la Délégation Archéologique en Iran 43. Paris.
- . 1976. Contribution a l'histoire de la sculpture archaïque de Suse. *Cahiers de la Délégation archéologique française en*

Iran 6: 47–82.

———. 1977. *L'Art Antique du Proche-Orient*. Paris: Mazenod.

———. 1980. Antiquités de serpentine. *Iranica Antiqua* 15: 155–166.

Basello, G.P. 2010. Elamite as administrative language. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*, Eisenbrauns, 61–88.

———. 2014. When I am dead, you will make kispu for me. *Lecture given at the Université Catholique de Louvain on September 18th 2014*.

Carter, E. 2010. Landscapes of Death in Susiana During the Last Half of the 2nd Millennium. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*, Eisenbrauns, 45–58.

———. 2014. Royal Women in Elamite Art. In: Kozuh, M., Henkelman, W.F.M., Jones, C.E. and Woods, C. (eds.) *Extraction & Control: Studies in Honor of Matthew W. Stolper*, Studies in Ancient Oriental Civilizations 68, 41–61.

Connau, J. and Deschesne, O. 1996 *Le Bitume à Suse*. Collection du Musée du Louvre. Paris: Editions De la Réunion des Musées nationaux.

Daems. 2005. *Human figurines from Neolithic to Chalcolithic Iran and Iraq. A Reassessment of Function and Use through Material, Morphology, Type, Damage and Context*, Ph.D Diss., Ghent University.

———. 2010. A Snake in the Grass. Assessing the Ever-Intriguing Ophidian Figurines. In: Carter, R. and Philip, G. (eds.) *Beyond the Ubaid. Transformation and integration in the late prehistoric societies of the Middle East*, Studies in Ancient Oriental Civilizations 63, 149–161.

De Graef, K. 2007. Les textes de V récent du chantier B à Suse (Fin Sukkalmahat – ca. 1575–1530 av. notre ère). *Iranica Antiqua* 42: 41–59.

———. 2008. Enemies ... A Love Story. Personal Warfare in Old Babylonian Letters. *Akkadica* 129: 181–195.

———. 2010. Inshushinak lu daru! Lawsuits in Old-Babylonian Susa. *Zeitschrift für Altorientalische und Biblische Rechtsgeschichte* 16: 27–48.

———. 2015. The Importance of Being the Son of One's Sister. Power and Heterarchy in the Sukkalmah Regime. *Lecture held at the 60th RAI, Warsaw*.

Dräffkorn-Kilmer, A. 1995. Music and Dance in Ancient Western Asia. In: Sasson, J.M. (ed.) *Civilizations of the Ancient Near East. Volume IV*, 2601–2613.

Faist, B. 2009. An Elamite deportee. In: Galil, G. and Millard, A. (eds.) *Homeland and Exile. Biblical and Ancient Near Eastern Studies in Honour of Bustenay Oded*, Vetus Testamentum Supplement 130, Leiden/Boston, 59–69.

Gautier, J.E. and Lampre, G. s.d. *Fouilles de Moussian*, Mémoires de la Mission Archéologique de Perse 8, Paris.

Ghirshman, R. 1963. Notes iraniennes XII. Statuettes archaïques de Fars (Iran). *Artibus Asiae* 26/2: 151–160.

———. 1968b. *Tchoga Zanbil (Dur-Untash). Volume II, Temenos, Temples, Palais, Tombes*, Mémoires de la Délégation Archéologique en Iran 40, Paris.

Good, I. 2012. Textiles. In: Potts, D.T. (ed.) *A Companion to the Archaeology of the Ancient Near East*, Blackwell Publishing Limited, 336–346.

Harper, O.P. 1992. *The Royal City of Susa*, New York: The Metropolitan Museum of Art.

Henkelman, W.F.M. 2010. Parnakka's Feast: sip in Parsa and Elam. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and*

Persia, Eisenbrauns, 89–166.

- Herbin, N. 2015. Stèle du roi Untash-Napirisha, “roi d’Anzan et de Suse. Retrieved on December 29th 2015 from www.louvre.fr/oeuvre-notices/stele-du-roi-untash-napirisha-roi-d-anzan-et-de-suse.
- Kellner, H.J. 1991. Grouping and Dating of Bronze Belts. In: Merhav, E. (ed.) *Urartu. A Metalworking Centre in the first Millennium B.C.*, Jeruzalem: The Israel Museum, 160–161.
- Lambert, W.G. 1979. Near Eastern Seals in the Gulbenkian Museum of Oriental Art. University of Durham. *Iraq* 41: 1–45.
- Malayeri, M. 2013. Scribal training in Old-Babylonian Susa. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*, Mémoires de la Délégation en Perse 58, 365–376.
- Meyers, P. 2000. The Casting Process of the Statue of queen Napir-Asu in the Louvre. *Journal of Roman Archaeology* 39: 11–18.
- Miroschedji, P. de. 1981. Fouilles du chantier Ville Royale II à Suse (1975–1977). *Cahiers de la Délégation archéologique française en Iran* 12: 9–136.
- Negahban, E. 1991. *Excavations at Haft Tepe, Iran*, University Museum Monograph 70, Philadelphia: The University Museum.
- Orthmann, W. 1975. *Der alte Orient*. Berlin: Propyläen Verlag.
- Pittman, H. 2003. Reconsidering the *Trouvaille de la statuette d’or*: Late Sukkalmah Period at Susa. In: Miller, N.F. and Abdi, K. (eds.) *Yeki Bud, Yeki Nabud. Essays on the Archaeology of Iran in Honor of William M. Sumner*, Cotsen Institute of Archaeology Monograph 48, 177–92.
- Porada, E. 1990. More Seals of the Time of the Sukkalmah. *Revue d’Assyriologie et d’Archéologie Orientale* 84/2: 171–181.
- Potts, D.T. 2004. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*, Cambridge World Archaeology, Cambridge University.
- Reiner, E. 1973. Inscription from a Royal Elamite Tomb. *Archiv für Orientforschung* 24: 87–102.
- Root, M.C. 2010. Elam in the Imperial Imagination: From Ninive to Persepolis. In: Álvarez- Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*, Eisenbrauns, 419–474.
- Sadafi, S.J. 2012. Prosopographische untersuchungen anhand der Rechtsurkunden aus Susa. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*, Mémoires de la Délégation en Perse 58, 355–364.
- Schmidt, E.F., Van Loon, M.N. and Curvers, H.H. 1989. *The Holmes Expedition to Luristan. Plates*, The Oriental Institute Publications 108, Chicago.
- Shishegar, A. 2015. *Tomb of the Two Elamite Princesses of the House of King Shutur-Nahunte Son of Indada* [in Persian with English summary]. Tehran: Cultural Heritage, Handcrafts and Tourism Organization.
- Spycket, A. 1986. Transposition du modelage au montage à Suse à la fin du III^e millénaire av. J.C. In: *Fragmenta Historiae Aelamicae. Mélanges offerts à M.-J. Stève*, Paris: Edition Recherche sur les Civilizations, 79–82.
- . 1992. *Les figurines de Suse*, Mémoires de la Délégation Archéologique en Iran 52, Paris.
- Steinkeller, P. 2012. Puzur-Inshushinak at Susa: A Pivotal Episode of Early Elamite History Reconsidered. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of*

the International Congress Held at Ghent University, December 14–17, 2009, Mémoires de la Délégation en Perse 58, 293–318.

Stronach, D. 2005. The Arjan Tomb: Innovation and Acculturation in the Last Days of Elam. *Iranica Antiqua* 40: 179–196.

Sumner, W. 1974. Excavations at Tall-i-Malyan. *Iran* 12: 155–180.

Tavernier, J. 2010. Iranians in Neo-Elamite Texts. In: Álvarez-Mon, J. and Garrison, M.B. (eds.) *Elam and Persia*, Eisenbrauns, 191–261.

Trümpelmann, L. 1981. Eine Kneipe in Susa. *Iranica Antiqua* 16: 35–44.

Vanden Berghe, L. 1963. Les reliefs élamites de Malamir. *Iranica Antiqua* 3: 22–39.

———. 1983. *Oud-Iraanse Rotsreliëfs*. Brussel: Koninklijke Musea voor Kunst en Geschiedenis.

Waters, M.W. 2006. A Neo-Elamite Royal Family. *Iranica Antiqua* 41: 59–69.

Wicks, Y. 2015. *Bronze 'Bathtub' Coffins In the Context of 8th-6th Century BC Babylonian, Assyrian and Elamite Funerary Practices*, Oxford: Archaeopress Publishing Limited.

CHAPTER THIRTY-EIGHT

Music



Bo Lawergren

No notated music or sounds have survived from Elam, yet we have quite good information on its musical culture because a rich set of images shows instruments and the circumstances of their use. These indicate a sophisticated musical culture and allow for a preliminary sketch of Elamite music history. This history lasted for three millennia, much longer than Western music history, which usually is considered to begin around 1000 CE.

Chogha Mish: the first banquet music, ca. 3200 BCE

Between 1961 and 1971, archaeologists from the University of Chicago excavated Chogha Mish, located 26 km east of Susa. During the third season they found a set of five sealing fragments near the bottom of a beveled-rim bowl dated to ca. 3200 BCE (Delougaz and Kantor 1996: 147–148, Part I).¹ The impressed images were parts of a large scene, which could be reconstructed because the fragments shared one pictorial element (a jar, Figure 38.1a).²

On the far right is the main figure, who squats on a cushion ([Figure 38.1a](#)). In front of her is a low table with food vessels. An attendant, holding a spouted jar and a three-necked milk vessel, bends toward her. Four seated musicians accompany the diner, having mastered the intricacies of ensemble playing. One musician plays an arched harp, here shown for the first time in history. Below is a man who extends his arms over the flat top of an object restored as a drum (it is not completely preserved on the sealing). The third musician holds two objects shaped like animal horns. Presumably, their narrow ends were cut open, allowing the player's breath to enter the horn; he holds the other horn in reserve. It may, possibly, have had a different pitch. The fourth person places his right hand against the cheek, a posture well known from singers in the ancient and modern Near East (Hickmann 1961: Figure 50). Presumably, the action makes it easier to hear skull vibrations. Although it is the earliest known ensemble, it includes the essential elements of a modern ensemble. The musicians play a string instrument, a percussion instrument, and a wind instrument.

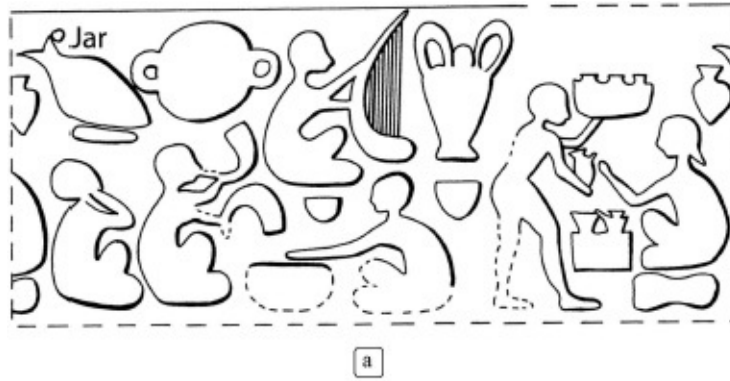


Figure 38.1 [a] Impression of cylinder seal from Chogha Mish ca. 3200 BCE (Courtesy of the Oriental Institute of the University of Chicago). The image is based on Delougaz et al. 1996: Pl. 155A, but the harp is slightly altered to more closely fit the photo in Delougaz et al. 1996: Pl. 45N; [b] Consecration plaque from Susa, ca. 2750–2600 BCE, Louvre Museum Sb14 (photograph by J. Álvarez-Mon).

The ensemble is the first known representation of a union of music and feasting. There seem to be no religious objects on display, but, of course, one cannot know if the feast had a hidden religious purpose. At any rate, it is no ordinary meal: the presence of music makes it unique.

A consecration plaque from Susa, ca. 2750–2600 BCE

With the beginning of the 3rd millennium BCE, instruments began to be frequently

represented in Mesopotamia and Elam in the context of banquet scenes (Rashid 1984: 48–61; Amiet 1966: 178, Figure 130). In particular, the depiction of the arched harps in consecration plaques found in religious contexts offers insights into Elamite musical practice.

An instrument is shown on a consecration plaque made of alabaster, 16 × 17 cm in size, and dated to 2750–2600 BCE found at Susa. As on Mesopotamian plaques, it is an arched harp, but its details differ sharply from those shown on Mesopotamian plaques. A comparison throws light on Elamite musical practice.

Arched harp in Susa. The alabaster 16 × 17 cm plaque, pierced with a central hole, exhibits two horizontal registers ([Figure 38.1b](#)). On the upper register a seated harpist plays for a seated man. Both figures seem to be of high rank, as indicated by clothing and posture. They are holding cups received from two small naked figures, probably servants. The harp ([Figure 38.2a.a](#)) has a long arched rod with a rectangular box attached at the lower end; strings span the length of the rod. The player holds her harp backward: the strings are near her body, and the box points away ([Figs. 38.1b](#) and [38.2a.a](#)).

Arched harps are also shown on Mesopotamian consecration plaques from Khafajah ([Figure 38.2a.b](#); Frankfort 1939: 43–48, Pls. 105, 106, 108), on a chlorite vessel from Bismaya ([Figure 38.2a.c](#); Wilson 2012: Pl. 55), and as “shoulder harps” in Pharaonic Egypt (Manniche 1991: Pl. 4; Lawergren 1980). On these harps the rods bend smoothly (C-shape) like a hunting bow, but on the Elamite harp the rod has an S-shape. Since the strings are not shown as straight lines, but curved, there are pictorial distortions. Perhaps the S-shape of the rod is exaggerated. Still, it must have differed greatly from the harp in [Figure 38.2a.b](#) because otherwise the elaborate construction in [Figure 38.2a.a](#) would hardly have been drawn.

The lower register shows a lion attacking a bull. On the right is a nude hero, who strikes the lion with a spear. The scene is violent, and not in accord with the peaceful drinking scene above or with scenes illustrated on the Mesopotamian consecration plaques. This stone is also smaller than those.

Arched harp in Sumer (southern Mesopotamia). Four consecration plaques from southern Mesopotamia discussed by Rashid (1984: Figs. 32–35) exhibit banquet scenes with harp players. The 32 × 29.5 cm limestone plaque from Khafajah (Rashid 1984: Figure 32) dated to 2600 BCE has three registers. At the far right of the top register sits a king and on his left stands a servant pouring him a drink. Further left stands a musician who plays the C-shaped arched harp. Three more people hold a large drinking vessel. In the middle row are a horse, a groom, and two men carrying a large jar. The bottom register shows four horses pulling a chariot. All aspects of the image on the plaque are peaceful, showing mostly drinking and music.

The other three plaques (Rashid 1984: Figs. 33–35) are from Khafajah, Tell Agrab, and Khafajah, respectively. All have similarly peaceful scenes and include a depiction of the C-shaped harp. Most likely, the ritual shown on the Mesopotamian plaques influenced Susa, but

the harp lost its C-shape and acquired an S-shape, and the subject matter became more agonistic.

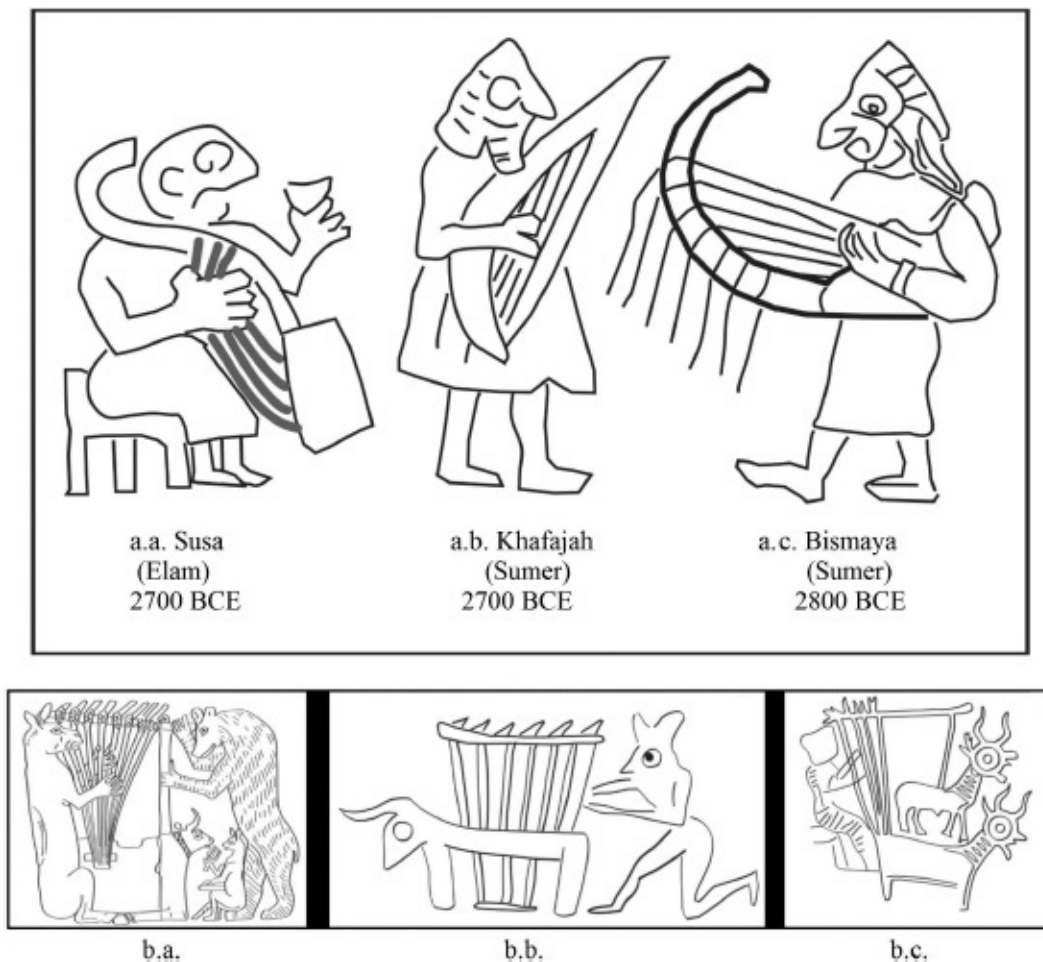


Figure 38.2 [a] Arched harps from the 3rd millennium. [a.a] Susa, 2700 BCE; detail based on the consecration plaque shown in Figure 38.1b; [a.b] Khafajah, Mesopotamia, 2700 BCE; detail of a consecration plaque (after Rashid 1975: 59); [a.c] Bismaya, Mesopotamia, 2900–2650 BCE; part of a chlorite vessel from Bismaya (after Wilson 2012: Pl. 55); [b] Bull lyres from the 3rd millennium: [b.a] Shown on a plaque made of shell and lapis lazuli mounted on the front of a bull-lyre in University Museum, University of Pennsylvania, ca. 2450 BCE; [b.b] Impression of a cylinder seal from Susa, ca. 2450 BCE; [b.c] Impression of a stamp seal from Failaka, ca. 1900 BCE (figure based on Lawergren 2001: 525, Figure 4, by permission of Oxford University Press).

Bull lyres: an early intercultural instrument, ca. 2450 BCE

In 1929 Leonard Woolley excavated bull lyres at Ur in southern Mesopotamia, and meticulously recovered their outlines. They had been buried ca. 2450 BCE. A small Elamite cylinder seal (Figure 38.2b.b) dated to a few centuries later also bears an image of this instrument. The correspondence is an early indication of the long-running musical entanglement of Elam and Mesopotamia. This type of lyre was a large string instrument, with

a shape that resembled a bison or bull, which flourished in a vast region bordering on Elam, Sumer, and Failaka during 2550–1530 BCE. Most bull lyres were excavated in Sumer, particularly in the city-states of Ur and Nippur, and their peak production occurred between 2500 and 2400 BCE.

On seals it is difficult to distinguish small details, but the full-size instruments that survived at Ur give greater precision in details. They reveal what species of animal the lyre portrays, what dimensions it has, how many strings and tassels, and so on. The body parts are in fact characteristic of bison and bulls, which have bulky bodies, heads with small horns, and beard under the chin. There are pairs of short feet.

None, however, reveal the original shape of the bull lyres, which had all once been three-dimensional wooden instruments covered in silver or gold foil. Because they were buried with the broad side resting on the ground, most were flattened by the earth into a thin, almost two-dimensional form, providing only a side-on view. When the lyres were exhibited in the British Museum, the excavator wished to restore the original thickness of the body. He decided upon a thickness of about 5 cm, and made the sides flat. We now know this is wrong. One lyre, the Plaster Lyre, which had been buried standing upright and had not been crushed, left an empty cavity in the soil. Taking great care, Woolley rescued the shape of the lyre by filling its cavity with plaster poured through a narrow tube. Unfortunately, the front of the lyre caved in, but most of the back survived. It shows that the back was not flat but had strongly marked ridges for hips, shoulders and spine. In other words, the Plaster Lyre resembled the three-dimensional shape of a bull or bison more than do the flat reconstructions in the British Museum.

A plaque mounted vertically on the front of a bull lyre in the University Museum, University of Pennsylvania, Philadelphia, is self-referential in that it offers a detailed drawing of a bull lyre ([Figure 38.2b.a](#)). It is played by a large donkey that squats while plucking the strings. A large bear holds the lyre arm to steady it, while a small fox sits on the ground holding a sistrum in the right hand and a frame drum in the left. This is a musical trio of animal musicians who behave like human musicians. If we include the bull, it becomes a quartet.

The seal from Susa, dated to the pre-Sargonic period (i.e. 2500–2300 BCE), does not show such clear details, but what is shown is not inconsistent with a donkey or bear ([Figure 38.4b](#)) (Amiet 1972: 182, no. 1443). According to Amiet, the lyre player kneels on his left leg and plucks the string. Another musician to his right strikes the same posture and shakes a sistrum. Further to the right are a scorpion (or frog) and a human head, and then a curved object (boat?) turned 90 degrees clockwise. The lyre, its player, and the sistrum player are clear, but the rest of the scene is not and may refer to a long forgotten tale.

Because Woolley found many bull lyres at Ur, scholars have long considered this city its true home,³ but recent archaeological finds widen the territory. Beside those from Ur and Susa, another lyre is seen on a stamp seal at Failaka dated ca. 1900 BCE ([Figure 38.2b.c](#); Kjærøum

1997: 163–164 and Figure 734; Lawergren 2001: 525, Figure 4; Aruz and Wallenfels 2003: 321, no. 220f). It is an intercultural instrument but may have originated in Mesopotamia, since most images were found there in 2500–1500 BCE. Not only did the instrument penetrate into peripheral regions; so did the animal associations. The Susa seal shows with certainty an instrument shaped like a bull with large horns, but it is unclear if the player is also an animal or is dressed in animal costume. Since he has dog-like ears, both player and instrument may have animal associations.

The Susa image, like those in Mesopotamia, displays a strong association between animals and music. A poem, written in 2125 BCE to celebrate the rebuilding of a temple in Lagash ca. 2144–2124, describes a room in the temple occupied by a bull lyre. Its sound was like that of a bull (Jacobsen 1987: 423–424). The text is taken from Gudea Cylinder A:

Within its storehouse (were) gems, silver, tin
Its chariot house (was)
A mountain planted on the ground,
Its “Harp back room” (was) a bull,
bellowing loudly,
its courtyard was (full of)
holy salutations, cymbal and *alu* lyre,
its stone stairs, laid against the house,
were (just) as if the foothills were
laid (up) toward the Ulnun.

According to the poem, the temple had a “Harp room”, which contained a bull that bellowed loudly like a harp. The text equates the sound of the bull and lyre. Indeed, the lowing sound of a bull may have been quite similar to that of a lyre, but there is no way of knowing as long as the acoustics of bull lyres remain unknown.

Pre-Sargonic lyres and harps on cylinder seals from Susa, 2500–2300 BCE

Cylinder seals from Susa have yielded three more images of instruments ([Figure 38.3](#); Amiet 1972: Pl. 33):

1444 (Louvre Museum Sb 2151; 2.5 cm high). This line-drawing depicts a human master-of-animals separating a seated lyre-player (partly broken off the seal) and a beast. Unlike other known lyres, the body is a double cone, but it may be related to large upright lyres with its set of vertical arms and/or strings, feet, and tuning pegs at the

top.

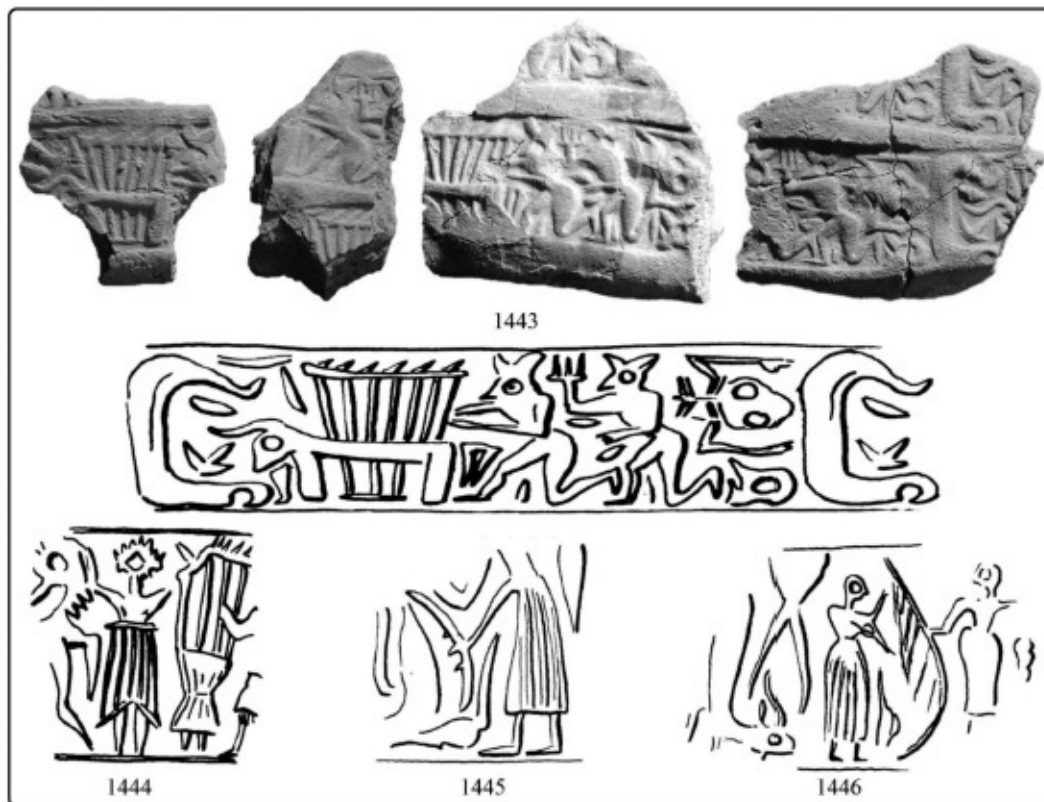
1445 (Louvre Museum Sb 2282). Line-drawing depicting a harpist dressed in a pleated skirt holds a harp or – possibly – a bow.

1446 (National Museum of Iran MT 759; 2.6 cm high). Line-drawing depicting a large arched harp placed between two standing people, and a goat on the left.

The seals show two different contexts for lyres and two for harps in Susa. Music has adopted a diversity of roles.

Difference between angular harps in Elam and Mesopotamia, 2nd millennium BCE

Terracotta figurines and plaques provide extensive information on instruments in Susa. Instruments are also shown on some Mesopotamian terracottas, and a comparison shows differences in the way harps were played. Two kinds of angular harps were used in both regions: vertical and horizontal – referring to the direction of the strings (see [Figs. 38.4a, 38.4b, 38.4c](#) versus 38.4d, 38.4e). Mesopotamian vertical harps were shown both in side views with the player and the harp in profile ([Figure 38.4a](#)), and in front views with the player and harp *en face* ([Figure 38.4b](#)). But Mesopotamian horizontal harps were only shown in side views with both player and harp in profile ([Figure 38.4d](#)).

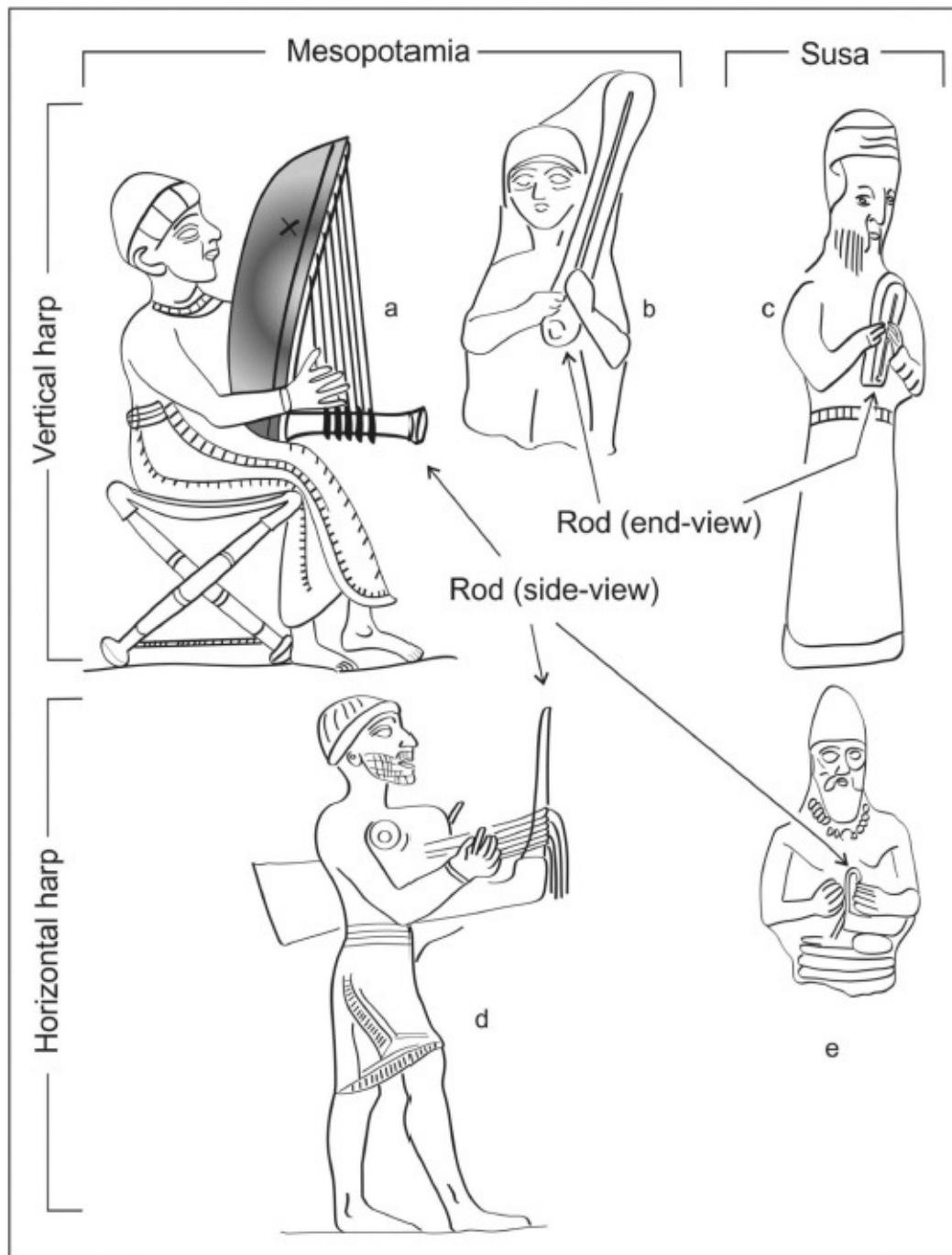


[Figure 38.3 Impressions of cylinder seals from Susa, ca. 2700 BCE. The numbers correspond to line drawings in Amiet's catalog \(1972, vol. I: 172; and photos vol. II: Pl. 137\). The photographs correspond to four fragmentary sealings: no. 1443 is in the National Museum of Iran, Tehran; nos. 1444 and 1445 are in the Louvre Museum, Sb 2151 \(2.5 cm height\) and Sb 2282, respectively. No. 1446 is in the National Museum of Iran, MT 759, height 2.6 cm \(photographs by J. Álvarez-Mon\).](#)

Depictions in Susa differ from Mesopotamian ones. In Susa vertical harps are only shown *en face* ([Figure 38.4c](#)), and are smaller than those depicted in Mesopotamia. Likewise, horizontal harps from Elam were smaller than those in Mesopotamia and were rendered differently: the instruments were shown in side view while the player was presented *en face* ([Figure 38.4e](#)). To produce this composite pose, the harp body was turned clockwise until it became parallel to the frontal plane of the player's body.

In [Figure 38.4e](#) there is a small elliptical pad between the bottom of the harp and the player's belt. Its purpose has been controversial. Over 20 years ago Agnes Spycket (in Harper et al. 1992: 187–188) described the figurine:

At his chest he holds an instrument not easily identified: an elongated body surmounted by a vertical post that ends in a hook turned inward. No strings can be seen under the left hand and forearm. Visible under the right hand, at the juncture of the body and the post, is an oblique patch marked with several grooves. Beneath the body of the instrument is something resembling a cushion or inflated pouch, which led Francis Galpin to identify the object as a wind instrument and dub it a “crooked pipe”.



[Figure 38.4 Elamite and Mesopotamian angular harps. \[a\] Side view of a vertical angular harp, Babylon, Mesopotamia, ca. 1900 BCE; \[b\] Front view of a vertical angular harp, Mesopotamia; \[c\] Front view of a vertical angular harp, Susa, 1900–1500 BCE; \[d\] Side view of a horizontal angular harp, Babylon, Mesopotamia, ca. 1900 BCE; \[e\] Front view of a horizontal angular harp, Susa, 1900–1500 BCE \(figure based on Lawergren 2001: 526, Figure 6, by permission of Oxford University Press\).](#)

It is now clear that the “hook turned inward” is the vertical rod of a horizontal harp; its top has been bent down to prevent it from sticking into, and injuring, the harpist. The “oblique patch” is probably a broad belt (sash) wound around the player’s waist. The “cushion or inflated pouch” may be a bundle of cloth attached to the belt. The harp probably rests on the cushion, which seems slightly pressed down by the weight of the harp.

Because of their shorter length, the harps of Susa probably had higher pitch than Mesopotamian ones. A millennium later, however, Elamite harps were shown in sizes as large as those in Mesopotamia (cf. Kul-e Farah and Madaktu, see below).

Animal orchestras, 1st millennium BCE

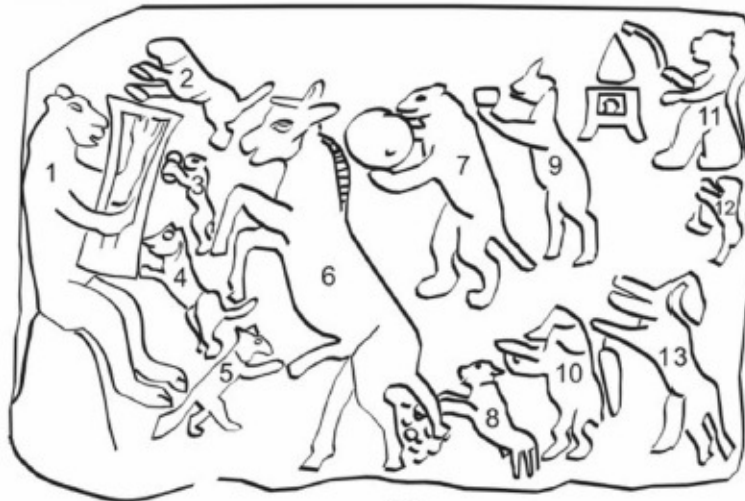
In western Asia there were images of animals playing in orchestras, including one in Elam. Since there are no texts, we do not know if they illustrate mythology. The topic had precursors in Pharaonic Egypt where an ostracon from Deir el-Medina, dated 1300–1050 BCE, shows a hyena blowing double pipes and a goat banging a drum (Manniche 1991: 113). On the Turin Erotic Papyrus (ca. 1160 BCE) a donkey plucks a harp, a lion plays a lyre, a crocodile strums a lute, and a vervet monkey blows pipes (Omlin 1973: pl. 11; Lawergren 1998: Figure 4). But the Egyptian examples are composed with a purpose quite different from the Near Eastern ones.

An animal orchestra at Susa (Elam)

The orchestra at Susa is shown on a Neo-Elamite cylinder seal excavated in that city. It dates to the eighth or seventh century BCE and shows a large pair of animals interspersed with a small pair ([Figure 38.5a](#)). All animals stand on their hind legs and probably dance. Amiet (1966: 544, Figure 417) identified the two large animals as a lion and a donkey. The donkey certainly plays a harp and the lion probably a tambourine.⁴ The small animal behind the lion plays a set of double pipes, and the other, between the donkey and lion, dances. Since all look at the harpist, he must be the leader of the band. As in many other instances, the harp is the main instrument of Susa. One can be more precise about this instrument. It is a vertical angular harp, for it has a straight horizontal rod at the base, a bent sound box, and vertical strings. Tassels hang underneath the rod of the harp. Four strings are shown, but it is likely to have had many more. Although the seal impression is small, some details are well observed: the upper body of the harp is slightly bent while the lower part is straight; tassels hang loosely under it. The donkey is shown with hooves on the hind legs, but the lion has toes.



[a]



[b]

Figure 38.5 [a] Animal orchestra from Susa, 8th–7th century BCE. Impression of a red marble cylinder seal, the height is 22 mm and diameter 8 mm. Louvre Sb 6281 (Amiet 1966: Figure 417). All animals walk or dance on their hind legs. From left: A large donkey plays an angular harp, a small animal dances, a large lion plays a drum, and a small animal plays double pipes (photograph by J. Álvarez-Mon); [b] Line drawing of the animal orchestra shown on the large orthostat from Tell Halaf, 9th to 8th century BCE (after photograph in Potratz 1961: 379, Figure 95, by permission of Kröner Verlag, Stuttgart). The animals walk (or dance) on hind legs. According to the excavation report of Opitz and Moortgat 1955: Pls. 100–101, the animals are: 1. A large lion that plays a tall thin lyre; 5. A fox; 6. An equid [donkey, semi donkey, or onager] with feces dropping under its tail; 7. A bear that plays a round frame drum; 8. A dog; 9. A goat that carries a small container; 10. A pig; 11. An ape.

An animal orchestra at Tell Halaf (North-East Syria)

Tell Halaf has produced two other examples of animal orchestras in the Near East. Dated to

the 9th or 8th century BCE, they are roughly contemporary with the image from Susa. These orchestras are sculpted in relief on two limestone orthostats, one large (0.78 m high and 1.17 m wide), and one small (0.43 × 0.66 m). Each orchestra occupies one side of an orthostat, but severe erosion makes it difficult to interpret details. To make matters worse, the orthostats were damaged in Berlin during WWII, and only photos survive.⁵ Some of these show various degrees of details. The most explicit ones appear to be stone rubbings (frottage), and on Figure 38.5b I have transferred one to a line drawing.

On the left is a lion which sits in a human pose and plays a lyre ([Figure 38.5b](#), no. 1);⁶ a perfectly normal instrument for this time and place.⁷ His right hand strikes across the full set of strings, but only those not touched by the left hand sound while the touched strings remain mute. This is a standard way of playing lyres. While playing, the lion looks out at a group of 12 animals, some of which play percussion instruments (certainly no. 7 and possibly nos. 2 and 3). Thus, the lion is the leader and the lyre is the chief instrument at Tell Halaf.

Some of the animals were identified in the Tell Halaf excavation report (Opitz and Moortgat 1955). All stand erect on their hind legs and, like the Susanian ones, are likely to be dancers. Only one other animal is as large as the lioness: an equid (no. 6) occupying the middle ground of the scene. It has adopted a dancing pose known as the *courbette* in classical dressage. The equid stands between the lyre and drum duo that provides the dance music. Four animals (nos. 2–4) occupy the vertical space between the lion and the equid. Possibly, they play small percussion instruments including castanets and finger-cymbals.

The other, smaller, orthostat at Tell Halaf shows a similar animal orchestra. Its players and instruments are nearly the same as those in the larger orchestra: a lion sits at the left edge and plays a tall, narrow lyre. A large equid dances in front of the lion and many of the figures seen in the large orchestra are also present. Since both orchestras are similar, it may have been carved by the same sculptor and perhaps one orthostat was a practice piece.

At Susa the lead instrument is a vertical angular harp, followed by a drum and a pair of pipes, but at Tell Halaf the lead is a lyre, followed by percussion instruments. The animal orchestras (one at Susa and two at Tel Halaf) are composed on the same principle: there are two main animals accompanied by smaller ones. In essence, it is more like a solo performance than ensemble music making. The concept is similar at Susa and Tell Halaf – although it is far from pure imitation, as there is an interesting difference between the two places. In line with our previous observation, the vertical angular harp was the main instrument in Elam, whereas the “thin lyre” was preferred in the Near East – in north-east Syria.

The sample of animal orchestras is small and therefore risky to generalize from, but the prevalence of angular harps is a consistent feature of Susa starting in the early 3rd millennium.

Music for animals in Greece

These images of the 8th and 7th centuries bring us close to the date when Greek sources begin to mention Orpheus, the marvelous singer whose song deeply affected animals (Guthrie 1993: 25–41). Among the first to mention him was the 6th century poet Ibycus (Lesky 1966: 181), and a century later, many more literary references occur. Simonides of Ceos (c. 556–468 BCE) described how birds and fish listen to Orpheus, Aeschylus (5th century, e.g., *Agamemnon*, 1629–1630) described his power to charm the whole of nature, and Euripides (c. 480–406 BCE) often mentions this power (e.g. *Bacchae*, 560–564), stressing its magical aspects.

The ability to make animals listen to, and react to, song is, of course, distinct from seeing them make music, but the tale of Orpheus shows that the idea was not an alien subject at the time. The exchange of ideas between Greece and the Near East is also understandable during this Orientalizing period (which started during the late 8th century BCE and continued into the 7th, Boardman 1973: 35–109). Greece was now open to a lively flow of ideas and artifacts from the Near East.

Elamite harp ensembles and outdoor sanctuaries at Kul-e Farah, 9th–6th century BCE

Kul-e Farah is an open-air site near Izeh in the western foothills of the Zagros (De Waele 1981: 45–61). The site is a narrow gorge cutting through the mountain, and its sides have a large number of rock reliefs carved directly into the cliff walls. These show scenes from the time when Kul-e Farah was used as a sacrificial ground by Elamite kings, priests, dignitaries, and other high-ranking people. They worshipped when the reliefs were made, in the few centuries between 900 BCE and 600 BCE. Musical ensembles are displayed in several places, and musicians were placed in prominent spots. Music would have been an essential part of the liturgy. Beside the elites of society, there are crowds of lesser-ranking worshippers who process up and down the cliff walls. Eric De Waele assumes the images are realistic representations of what happened at Kul-e Farah. He identifies a “sacred area” where there is a concentration of rock reliefs, flowing water in proximity, and a large flat boulder suitable as an altar for the sacrifice. At the front of Kul-e Farah – at the wide opening of the gorge – is an expanse of fertile plain. On the opposite side of Kul-e Farah is the cave and seasonal waterfall of Shekaft-e Salman. It too has rock reliefs, but none show musical instruments.

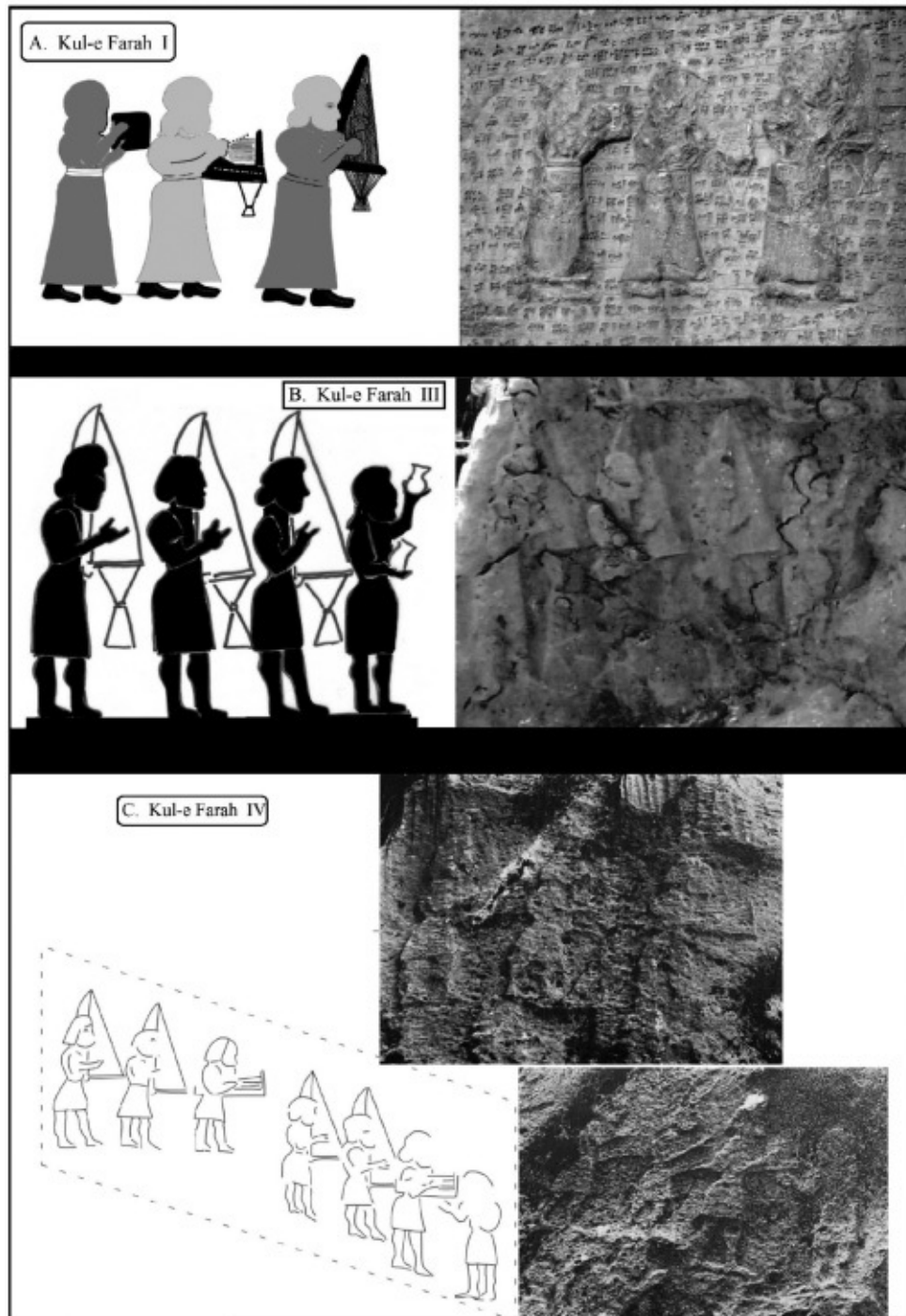
Three of the Kul-e Farah reliefs show assemblies of harps in various combinations. Although some of the carvings have eroded severely, surviving details allow several different kinds of harps to be distinguished. The first group (KF I) has been known for a century, but KF III and IV were published more recently by De Waele and discussed only a few years ago (De Waele 1989: 29–38; Álvarez-Mon 2013). Angular harps dominate, but there is also a square drum. The three groups provide a variety of combinations. Horizontal (H) and vertical (V)

harps are grouped in the following patterns ([Figure 38.6](#)):

KF I: (square frame drum) + H + V ([Figure 38.6a](#)); end of 7th–6th century BCE.

KF III: V + V + V + conductor/leader ([Figure 38.6b](#)); 8th–7th centuries BCE.

KF IV: V + V + H; V + V + H + conductor/leader ([Figure 38.6c](#)); 9th century BCE.



[Figure 38.6](#) Rock carving of harp ensembles at Kul-e Farah, 9th–7th century BCE. The figure is based on Lawergren 2001: 527, Figure 7 (by permission of Oxford University Press; line drawings and photographs of A (KF I) and B (KF III) by J. Álvarez-Mon; line-drawing and photographs of C (KF IV) from De Waele 1989).

The latter group is drawn on a very rough surface, making it difficult to determine the number of players (six or three). Since the group has one leader (at the front), the former interpretation is more likely.

KF III and IV both show a “conductor” at the front. But it is a remarkably early date for such a functionary, and one cannot be certain about his/her role. Moreover, the “conductor” does not behave in a consistent manner: in KF III he/she faces forward and in KF IV backward. There is another varied detail: the tassels that hang under the horizontal rod. They are present in groups KF I and III, but not in group KF IV.

There is another facet to Kul-e Farah, the open-air sanctuary located in a deep gorge: its acoustical properties. The gorge is about 600 m long and opens up to the fertile plane bordering Izeh. Its opening is ca. 200 m wide, but it narrows and curves as it proceeds into the mountain. Its contour resembles the boot-shape of Italy (De Waele 1989: Figure 3). The “leg” is oriented in the east-west direction, and the “toe” points south. The “sacred area” identified by De Waele (1981: Figure 3) is located near the “knee”. A seasonal stream emerges at the toe of the boot and runs past the sacred area where the vertical walls of the gorge are nearly flat and made of hard rock. In such a space one expects sounds will bounce off the hard walls and produce echoes. With 200 meters between the walls, the reflected sound would return after about one second.⁸ Since the path is relatively short, the sound would dissipate little, and multiple reflections would produce a ringing effect. This might give it a mysterious and magical air, perhaps even a numinous one.

This may be the condition Henkelman and Khaksar have in mind when they discuss Kul-e Farah. They deal with the psychological impact of these unusual and startling sounds. As they see it (Henkelman and Khaksar 2015: 226):

Sounds not only carried traditional compositions and songs, thus connecting with a communal past (and future), but, reinforced by natural resonance, it could create a transcendental experience. Especially at Kūl-e Farah, sound may acquire an almost physical quality... . This, a crucial key to Elam’s experience of the divine, could make a numinous abode speak and sing, become resonant with sound that in turn inspired the gathering with a sense of its own immortality.

Put more plainly, the acoustics at Kul-e Farah may lead to speculations about the role of music in Elamite worship, but it is difficult to understand what effects it may have had in the past, that is, whether the Elamites experienced it as one would today.

The Elamite royal orchestra of Madaktu, ca. 654 BCE

After Ashurbanipal’s defeat of Te’umman, the Assyrian king appointed Huban-nikaš II as the

new ruler of Elam (Waters 2013: 480). The latter was a member of the Urtaki family and had fled to Ashurbanipal's court when Te'umman usurped the Elamite throne. A relief in the British Museum shows the people of the royal city of Madaktu streaming out to greet Huban-nikaš II, newly appointed as king of Elam by Ashurbanipal. Along with them comes a large and splendid orchestra. There are seven vertical angular harps, two horizontal harps, and two pairs of double pipes. The choir that follows behind incorporates six adults and nine juveniles ([Figure 38.7a](#)). This orchestra has been known for more than 150 years and received much attention, but the comments made about it have not always been accurate.²

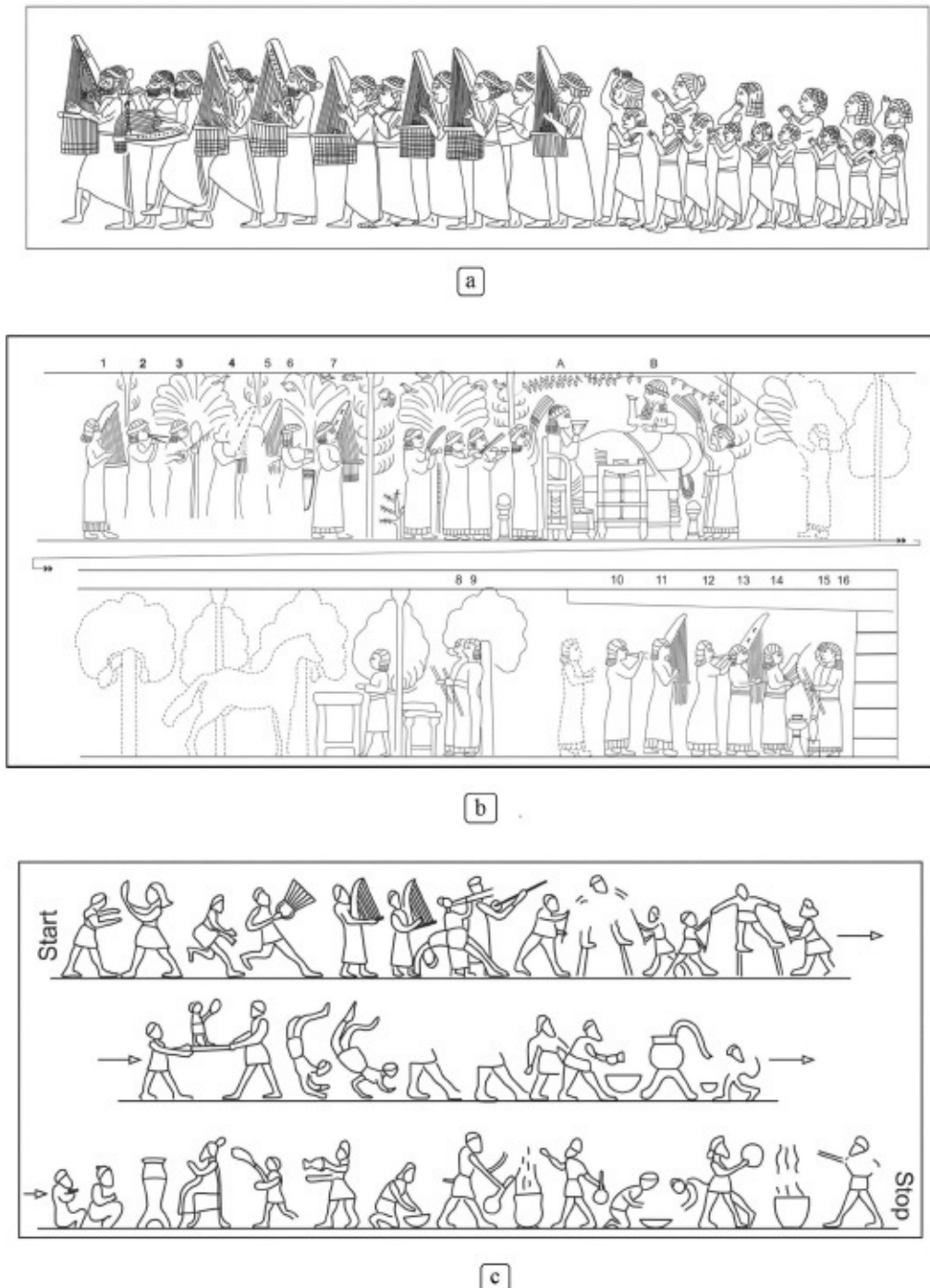


Figure 38.7 [a] Elamite orchestra marching outside the city of Madaktu. Wall relief in an Assyrian palace, Nineveh, 660–650

[BCE \(figure based on Lawergren 2001: 527, Figure 7, by permission of Oxford University Press\); \[b\] Ashurbanipal and companion drinking to the music of a large orchestra. Wall relief in the North Palace at Nineveh, 645–635 BCE \(line drawing based on Lawergren 2001: 527, Figure 7, by permission of Oxford University Press\); \[c\] A scene inscribed in a bronze bowl from Arjan, ca. 650 BCE \(Álvarez-Mon 2010: Pl. 64\).](#)

The composition of the orchestra is similar to the one playing at Ashurbanipal's banquet (below). Both have large numbers of vertical angular harps, a few double pipes, and a sprinkling of other instruments.¹⁰ Many instruments seem to play simultaneously, and some have speculated that they played chords. But this is not necessarily the case, since the music may be heterophonic, that is: many instruments play (nearly) the same tune. Extant vertical angular harps have survived from the time of the New Kingdom of Egypt, and each harp had around 20 strings. If Elamite harps had similar construction, the Madaktu orchestra would have had about 160 strings, an impressive amount, similar to the violin section of a modern symphony orchestra.

Madaktu, Susa, and Hidalu were Elamite royal cities during the Neo-Elamite period (Potts 1999: 483). Since Madaktu was large enough to support a substantial court orchestra, Susa, the capital, is likely to have possessed an even larger ensemble.

Assurbanipal's banquet orchestra, 653 BCE

One of the best-known images of Assyrian art is Ashurbanipal's banquet celebrating his victory over Te'umman at the battle of Tell Tuba in 653 BCE ([Figure 38.7b](#)). Te'umman's decapitated head hangs in a nearby tree while the Assyrian king drinks with a female companion. Recently Javier Álvarez-Mon (2009) has proposed the banquet included many Elamite elements, and I wish to show that the orchestra, too, is likely to have incorporated Elamite features.

Up to a few years before the battle, Elam and Assyria were on peaceful terms. In 674 Esarhaddon (680–669), Ashurbanipal's father, had signed a bilateral treaty with the Elamite king Urtak, and it assured "good will and peace ... friendship and comradeship". Assyrian princes and princesses visited the Elamite court, and relations were harmonious until 664 BCE, when Urtak for no apparent reason decided to attack Babylon. Ashurbanipal saw it as a hostile act; Urtak died in the aftermath. Te'umman seized the Elamite throne in a coup d'état, and courtiers loyal to Urtak went into exile in Assyria. Apparently, they and their retinues stayed in Assyria until Te'umman was defeated in 653. As Álvarez-Mon puts it, "[T]he battle of Tell Tuba can be considered an armed clash between two main Elamite factions, those supporting the House of Urtak (and forcefully backed by Assyrian forces) and those supporting Te'umman". Seen in that light, the musicians present at the banquet could equally well be Elamites loyal to Urtak as Assyrians.

Álvarez-Mon has suggested that the banquet has several Elamite aspects. But one argument not considered concerns the orchestra. It is large, with several *vertical* angular harps. We do not know if the players are Assyrians or Elamites, but the large orchestra from Madaktu, also with many *vertical* angular harps, is definitively Elamite. On the other hand, purely Assyrian ensembles had only pairs of *horizontal* harps at this time. Vertical and horizontal harps were played with vastly different technique: on the former the strings were plucked by the fingers of both hands; on the latter they were hit by a plectrum held in the right hand while the left hand dampens some of the strings. Harpists may have specialized in one or the other technique.

There are a number of sumptuous publications of Ashurbanipal's banquet as illustrated on wall reliefs in the British Museum. Richard Barnett's 1976 book is clear with its black and white photographs in large format (52 cm large pages of plates), but Pauline Albenda's 1976 article is more accessible. Her line drawing of the panels shows the banquet and its immediate surroundings. The reliefs have three registers: the top one shows the banquet and most of the musical ensembles. The second one, immediately below it, presents a garden with wide, deciduous trees lined up in rows. The bottom register has a forest of narrow trees and a few game animals. Figure 38.7b shows only the top register with Ashurbanipal (B) and his consort (A). They are surrounded by instruments numbered in three sets: #1 (1–7), #2 (8–9), and #3 (10–16). Judging by the spacing of the players, and the way their faces are turned, the three ensembles are independent. Only #1 is close to the king and is the only one where all the musicians play. It contains four harps, one lute, one drum, and a pair of double pipes. The pipes are loud, and a pair would balance the five string instruments. So the #1 ensemble makes sense musically. The #3 ensemble, with three string instruments and two pairs of double pipes, probably makes sense as shown, but the strings may be overpowered if the two idle pipers on the right joined in.

Arjan, ca. 600 BCE

During the 3rd millennium BCE, music was shown in ritual contexts, but in the next two millennia more secular contexts began to appear. An image on a bronze bowl is a case in point. It was found at Arjan in the Zagros foothills near modern Behbahan and dates to ca. 600 BCE (Álvarez-Mon 2010: 273). The bowl is 43.5 cm in diameter and has a height of 8.5cm. It resembles the type of bowl sometimes called Phoenician, which typically has iconography engraved in concentric registers on the inner surface (Markoe 1985). The Arjan bowl depicts a lively scene ([Figure 38.7c](#); Álvarez-Mon 2010: Pl. 64, register II) with a seated ruler entertained by an ensemble of musicians, dancers, stilt-walkers, and acrobats, while cooks prepare food and drink, and others carry jars and pots. It looks like a secular occasion, but in the absence of texts, there is no certainty.

Most of the ensemble is in the top register of Figure 38.7c. A lyre, two vertical angular harps, a set of double pipes, and a lute are shown. In the bottom register there is probably a small frame drum near the right side. It looks like an Elamite ensemble, although a Phoenician artist may have made it. In choosing vertical harps, he/she adopted a millennium-old Elamite motif. Phoenician artists were flexible. When they worked on Greek musical scenes, they adopted Greek customs and drew lyres.¹¹ I published this joyful scene 15 years ago (Lawergren 2001: 527), but only now has the significance become clear.

Conclusions

In this survey of Elamite music from ca. 3200 to 550 BCE, unique features have emerged. First, evidence for music appears earlier in Elam (ca. 3200 BCE) than in any other part of the Near East. At this early stage, all harps were arched, but an extreme form is shown on a consecration plaque from Susa.

Elam also had bull lyres during the time they were popular in their Mesopotamian homeland, that is, 2450–1500 BCE. Because this type of lyre was associated with bulls, they may have been developed in the belief that the sound of bull lyres was similar to that of a real, lowing bull. Indeed, the lyres of Ur *looked* nearly like three-dimensional statues of bulls. The similarities went beyond portraiture: for example, the strings, made of gut, appeared to exude both from the stomach of the bull lyre and of the bull. Apparently, Sumerians thought that animals and humans could play bull lyres with equal rights. Some of this ambivalence is expressed in early Mesopotamian literature.

Around 1900 BCE, harp fashion changed: arched harps disappeared and angular harps emerged. During the first half of the 3rd millennium, Elamite angular harps were much smaller than Mesopotamian angular harps, but by 1000 BCE they had become similar. During the first half of the first millennium, further changes occurred in musical fashion: the vertical angular harp became closely associated with Elam, while horizontal angular harps became an Assyrian specialty. The latter appeared in royal rituals, such as the pouring of libations after a successful lion hunt. Assyrian horizontal angular harps may have inspired “steppe harps” which have been excavated in the far western part of China (Xinjiang), where they flourished around 500 BCE (Lawergren 2003: 89–91 and Figure 38.7b).

Unlike the situation in Assyria, some Elamite ensembles were large and predominantly composed of vertical angular harps. Those at Ashurbanipal’s banquet, at Madaktu, and at Kul-e Farah are typical. In Elam vertical harps continued, and we see several examples on the bowl from Arjan.

Notes

- 1 Abbas Alizadeh, private communication.
- 2 Abbas Alizadeh, private communication, who does not consider it a fish unlike the statement on Delagouz and Kantor: 47, n. 68.
- 3 Particularly in the Royal Cemetery at Ur excavated by Woolley in the 1920s.
- 4 Another animal orchestra is said by Amiet to be illustrated on a bronze from Luristan, shown in Potratz 1961: 379, but it is, in fact, a hunting scene drawn on a belt-plate and the animals are not playing music.
- 5 Photographs and descriptions are given in Opitz and Moortgat 1955: Pls. 100 and 101.
- 6 Images of the orthostat are given by Thimme et al. 1968: 183, Figure 25; Bossert 1951: 147, no. 473; and Potratz 1961: 358, Figure 79. The latter is a line drawing on which Figure 8 is based. The image in Bossert 1951 appears to be a rubbing of the orthostat. Thimme et al. 1968 is similar but has smoother surfaces and black outlines drawn around each animal.
- 7 Lawergren 1998: Figure 1v. The “thin lyre” fits neatly into a large systematic compilation of flat-bottomed lyres published 20 years ago. It had a long tradition (2300–2700 BCE) in the Near East, but differed radically from bull lyres in size, shape, and period of popularity (ca. 2400 BCE).
- 8 $\text{Travel time} = t = 2 * d/v = 2 * 200/343.2 = 1.2 \text{ second}$, where v is the speed of sound in air (in m/s and d is the length in m).
- 9 In 1940, Curt Sachs (1977: 82) observed finger positions and deduced which chords were played by the Madaktu orchestra. Alas, he altered the positions to fit his predetermined notion of pentatonic scales (for discussion, see Lawergren 1996: column 41).
- 10 For extant Sumerian double pipes, see Lawergren 2000.
- 11 See the examples from Greece labeled G8 in Markoe 1984: 328 and from Cyprus labeled Cy6, Cy3 in Markoe 1984: 253 and 246.

References

- Albenda, P. 1976. Landscape Bas-Reliefs in the *Bit-Hilāni* of Ashurbanipal. *Bulletin of the American Schools of Oriental Research* 224: 46–72.
- Álvarez-Mon, J. 2009. Assurbanipal's Feast: A View from Elam. *Iranica Antiqua* 44: 131–180.
- . 2010. *The Arja'n tomb: at the Crossroads of the Elamite and the Persian Empires*, Acta Iranica 49. Leuven: Peeters.
- . 2013. Braids of Glory. Elamite Sculptural Reliefs from the Highlands: Kūl-e Farah IV. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress Held at Ghent University, December 14–17, 2009*, Mémoires de la Délégation en Perse 58. Leiden – Boston: Brill, 207–248.
- Amiet, P. 1966. *Elam*. Auvers-sur-Oise: Archée.
- . 1972. *Glyptique susienne des origines à l'époque des Perses achéménides: cachets, sceaux-cylindres et empreintes antiques découverts à Suse de 1913 à 1967*, Mémoires de la Délégation Archéologique en Iran 43. Paris: Paul Geuthner.
- Aruz, J. and Wallenfels, R. 2003. *Art of the First Cities, The Third Millennium B.C. from the Mediterranean to the Indus*. New

- York: The Metropolitan Museum of Art.
- Barnett, R.D. 1976. *Sculptures from the North Palace of Ashurbanipal (668–627 B.C.)*. London: British Museum Publications Ltd. for the Trustees of the British Museum.
- Boardman, J. 1973. *The Greeks overseas, their early colonies and trade*. London: Thames and Hudson.
- Bossert, H.T. 1951. *Altsyrien: Kunst und Handwerk in Cypern, Syrien, Palästina, Transjordanien und Arabien von den Anfängen bis zum völligen Aufgehen in der griechisch-römischen Kultur*, with the collaboration of R. Naumann. Tübingen: Wasmuth.
- Delougaz, P. and Kantor, H.J. 1996. *Chogha Mish*, Oriental Institute Publications 101. Chicago: Oriental Institute of the University of Chicago.
- De Waele, E. 1981. Travaux Archéologique à Shekaft-e Salmān et Kūl-e Farah près d'Īzeh (Mālamir). *Iranica Antiqua* 16: 45–61.
- . 1989. Musicians and Musical Instruments on the Rock Reliefs in the Elamite Sanctuary of Kūl-e Farah (Īzeh). *Iran* 27: 29–38.
- Frankfort, H. 1939. *Sculpture of the Third Millennium B.C. from Tell Asmar and Khafajah*, Oriental Institute Publications 44. Chicago: Oriental Institute of the University of Chicago.
- Guthrie, W.K.C. 1993. *Orpheus and Greek Religion*. Princeton, NJ: Princeton University Press.
- Harper, P.O., Aruz, J., Tallon, F. 1992. *The Royal City of Susa, Ancient Near Eastern Treasures in the Louvre*. New York: The Metropolitan Museum of Art.
- Henkelman, W.F.M. and Khaksar, S. 2015. Elam's Dormant Sound: Landscape, Music and the Divine in Ancient Iran. In: Eneix, L.C. (ed.) *Archaeoacoustics: The Archaeology of Sound: Publication of Proceedings from the 2014 Conference in Malta, Myakka City 2014*. Myakka City: OTS Foundation, 211–231.
- Hickmann, H. 1961. *Ägypten*, Musikgeschichte in Bildern 2. Leipzig: VEB Verlag.
- Jacobsen, T. 1987. *The Harps that Once ... Sumerian Poetry in Translation*. New Haven, CT: Yale University Press.
- Kjærøum, P. 1997. Stamp Seals and Seal Impressions. In: Højlund, F. and Andersen, H.H., *Qala'at al-Bahrain 2. The Central Monumental Buildings*, Jutland Archaeological Society Publications 30/2. Højbjerg: Jutland Archaeological Society, 163–164.
- Lawergren, B. 1980. Reconstruction of a Shoulder Harp in The British Museum. *Journal of Egyptian Archaeology* 66: 165–168.
- . 1996. Harfe. In: Finscher, L. (ed.) *Die Musik in Geschichte und Gegenwart*, vol. 4. Kassel: Bärenreiter – Stuttgart: Metzler, cols. 39–62.
- . 1998. Distinctions Among Canaanite, Philistine, and Israelite Lyres, and Their Global Lyrical Contexts. *Bulletin of the American Schools of Oriental Research* 309: 41–68.
- . 2000. Extant Silver Pipes from Ur, 2450 BC. In: Hickmann, E., Laufs, I. and Eichmann, R. (eds.) *Studien zur Musikarchäologie II. Musikarchäologie früher Metallzeiten*. Rahden, Westfalen: Verlag Marie Leindorf, 121–132.
- . 2001. Iran. In: Sadie, S. and Tyrrell, J. (eds.) *The New Grove Dictionary of Music and Musicians*, vol. 12. London: Mcmillan, 521–530.
- . 2003. Western Influences on the Early Chinese Qin-Zither. *Bulletin of the Museum of Far Eastern Antiquities* 75: 79–

- Lesky, A. 1966. *A History of Greek Literature*, translated by J. Willis and C. de Heer. New York: Thomas Y. Crowell.
- Manniche, L. 1991. *Music and Musicians in Ancient Egypt*. London: British Museum Press.
- Markoe, G. 1985. *Phoenician Bronze and Silver Bowls from Cyprus and the Mediterranean*. Berkeley: University of California Press.
- Omlin, J.A. 1973. *Der Papyrus 55001 und seine Satirisch-erotischen Zeichnungen und Inschriften*. Torino: Fratelli Pozzo.
- Opitz, D. and Moortgat, A. 1955. *Tell Halaf*, vol. III, *Die Bildwerke*. Berlin: De Gruyter.
- Potratz, J.A.H. 1961. *Die Kunst des alten Orient: Babylon und Assyrien, Alt-Syrien, Alt-Anatolien und das alte Persien*. Stuttgart: Kröner.
- Potts, D.T. 1999. *The Archaeology of Elam: Formation and Transformation of an Ancient Iranian State*. Cambridge: Cambridge University Press.
- . (ed.) 2013. *The Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press.
- Rashid, S.A. 1975. *Mesopotamien*. Leipzig: VEB Deutscher Verlag für Musik.
- . 1984. *Mesopotamien*, Musikgeschichte in Bildern 2/2. Leipzig: VEB Deutscher Verlag für Musik.
- Sachs, C. 1977. *The History of Musical Instruments*. London: Dover (reprint; original edition New York, 1940).
- Thimme, J., Åström, P. and Lilliu, G. (eds.) 1968. *Frühe Randkulturen des Mittelmeerraumes: Kykladen, Zypern, Malta, Altsyrien*. Baden-Baden: Holle.
- Waters, M.W. 2013. Elam, Assyria, and Babylonia in the Early First Millennium BC. In: Potts, D.T. (ed.) *The Oxford Handbook of Ancient Iran*. Oxford: Oxford University Press, 478–492.
- Wilson, K.L. 2012. *Bismaya. Recovering the lost city of Adab*, Oriental Institute Publications 138, with contributions by J. Lauinger, M.L. Phillips, B. Studevent-Hickman and A. Westenholz. Chicago: The Oriental Institute of the University of Chicago (available in digital format at <https://oi.uchicago.edu/sites/oi.uchicago.edu/files/uploads/shared/docs/oip138.pdf>).

Part VIII

The legacy of Elam



CHAPTER THIRTY-NINE

Elamite administrative and religious heritage in the Persian heartland



Wouter F.M. Henkelman

MDP 10 2 and 21, two Old Babylonian texts from early Sukkalmah-period Susa, are written on half-circular or tongue-shaped tablets with flattened left edges.¹ The seal impression on the left edge is accompanied by a caption. MDP 10 2 has a string hole at each side of the left edge (no images of the other tablet's left edge are available). Although the unusual format at first sight may suggest that they were tags of some kind (so De Graef 2009), the contents show that the tablets are self-contained records in the full sense of the word. Despite several unclear aspects, it appears that they are receipts for livestock used in a series of sacrifices.

Tablets of comparable format are known from Neo-Assyrian contexts (where they are known as 'dockets' – see Radner 1997: 26–31), but the closest parallels, notably in terms of document category, are from Achaemenid Persepolis. There, tongue-shaped tablets were used for economic transactions (not legal, as in the Assyrian case) of various kinds, but mostly for receipts. One such 'memorandum,' PFa 02, records, in Elamite, the allocation of barley for the purpose of acquiring livestock, which was then sacrificed in four different rites: for Napiriša and Adad, for/at *tikrakkaš* and *kušukum*. The sacrifices listed in MDP 10 2, some 15 centuries before, includes a rite called *gūšum*, a term occurring only in Susa contexts and probably reflecting an Elamite word. Achaemenid-Elamite *kušukum* may well derive from it (through reduplication: **kušu-kušum* > **kušukušm* > *kušukum*; Koch 1977: 120–125; Hinz and Koch 1987 q.vv.; Henkelman s.d. 3 §4).

The above example illustrates the potential of tracing Elamite-Persian continuities in the sense that it shows the antiquity of institutional households organising certain sacrifices, the possible endurance of cultic terminology, and use of a particular tablet format for a particular kind of record. All this potential is marred, however, by the huge chronological gap, only slightly mitigated by the recent find of Neo-Elamite tablets in tongue-shaped and other formats (Yāsūg, unpublished). Elamite documentary sources are generally sparse and unevenly spread throughout history; only rarely are the same document types and thematic scope found

in corpora from different periods.

Yet another matter is how to appreciate the Elamite elements in Persepolis Fortification tablet PFa 02, especially since the sacrifices had been ordered, organised and performed on behalf of the Persian heartland administration at the time of Darius I. To this may be added that the officiant had an Iranian name, Kaubara, an imprecise variant of Kambarma (OP Gaubaruva-; cf. PF 0353), better known from its Greek form, Gobryas. How to explain the Elamite deities Napiriša and Adad (worshipped in Elam since the early second millennium) and the Elamite term *kušukum* in an otherwise Persian context?

The answer to the above question depends on the interpretative model one chooses. One is, in its clearest and original form, that of an Indo-Iranian *Landnahme*: a narrative of migration and conquest by groups of Iranian-speaking or Aryan people large enough to impose their rule (see, e.g. Hinz 1976/1979 I: 42–52, 56). The migrants are thought to have carried with them an essentially mature intellectual culture. Native elements, if any, were absorbed and adapted within an existing and stable framework, hence without truly impacting the incoming cultural-ethnic identity. This identity was for a long time regarded as superior; in more recent versions of the model it is pictured more neutrally as particular and clearly distinct from any native culture (so, e.g., Kellens 2002; discussion in Henkelman 2017b: 290–303).

The second, alternative model entails, again in its clearest form, a denial of Persian identity as a *linear* development from its Indo-Iranian roots. Articulated in a seminal study by Pierre de Miroschedji (1985; also 1990), it proposes a Persian ethnogenesis in which merging Elamite and Indo-Iranian cultural traditions jointly produced a new identity. Incorporating ever-larger portions of the population of southwestern Iran, it eventually produced the Persian nation as it emerges in the historical record, this in analogy to the process that led to the formation of Germanic peoples in Late Antiquity (as famously proposed by Wenskus 1961). Miroschedji further argued that reduced settlement density in the centuries prior to the Achaemenids probably pointed to increased nomadism, a factor that would have facilitated the merging of various ethnic groups and their cultural traditions. While in itself valid, the second inference builds an incomplete picture in the sense that it underestimates the role of confrontations between agro-pastoralist inhabitants of the highlands with Elam's urban culture in the all-important contact zone of the Zagros piedmonts east of Khūzestān (cf. Rollinger 1999: 125f.; Henkelman 2011a: 582–584).

The ethnogenesis model does not, it should be stressed, project a homogenous cultural landscape as the outcome of acculturation (for an instructive example, see Henkelman 2011b: 4–6). While adoption of a single language and unified culture may coincide with ethnogenesis, they are not decisive prerequisites of it. What one expects rather than full-blown unity is a spectrum of cultural attitudes – yet gathered under a broad and inclusive cultural-ethnic umbrella, *viz* 'Persian'. It is this ethnonym and the traditions projected onto it that make decisive unifiers.

Although the difference is not always observed in debates on the subject, both models here outlined are hypotheses, not conclusions: their hypothetical nature is a function of the absence of conclusive evidence – historical or archaeological – confirming or falsifying either of them. Their prime value lies in the number of historical phenomena they coherently explain. The present author is convinced that the ethnogenesis model is more successful in this regard; it is this model that finds increasing support in the mounting data from the Persepolis Fortification archive. Overall, it seems to be the ascending perspective, but support for it is not spread evenly over all (sub)-disciplines implicated by the question. Notably among scholars of comparative Indo-European linguistics and Iranian religions, the notion of large-scale cultural migration and imposition, alongside the belief in an original and definable Indo-European culture and an Aryan homeland, continues to find support.

The case of the Medes may serve as a starting point for our discussion, as it holds some prognostic value for contemporaneous developments in southern Iran. Assyrian sources first mention a ‘country of the Medes’ in the northwestern Zagros in 835 BCE. At that time, the Medes seem to have been neither particularly important nor very conspicuous within the medley of polities and ethnic groups that made up northwestern Iran. In the course of the next two centuries, however, Median territory – as perceived by the Assyrians – expanded, now comprising a large number of ‘city lords’ and areas previously not seen as Median (Radner 2003). Eventually, it became a force strong enough to launch successful raids on the Assyrian heartland. This development can only mean absorption of other groups into what was, essentially, an open and still forming identity. To be added to this are, first, the development of (local) administrative and economic networks in response to Assyrian tribute demands (perhaps inaugurated in Kassite times) and, secondly, the co-optation, hence strengthening, of local rulers. These are typical ingredients for a process known as secondary state formation (Brown 1986). It was aided by the trade network depending on the Great Khorāsān road, a crucial artery for both the Assyrians and the Medes, which undoubtedly prompted increased social stratification. Yet, as Sancisi-Weerdenburg (1988) pointed out, state formation is not an irreversible process, at least not until it reaches a certain stability independent from *ad hoc* factors and individual rulers. The collapse of the Assyrian empire took away the critical impetus that had driven the state formation; at the same time, it must have severely impacted the commercial network that had supported the process.

The lessons to be taken from the Median case for that of the Persians are legion. First, the comparison prompts the question as to the importance of trade in developments in the south. The introduction and spread of the dromedary since the late second millennium enabled trans-desert routes that previously would have been hardly viable. The Fortification archive shows, moreover, that camels were a key factor in southern Iran and were also deployed on the route from Persepolis to Hinduš and Gandhāra (Henkelman 2017b: 55–63). It may well be that this Iranian extension of the emerging camel trade network predated the rise of the Persian

Empire. Indeed, it has been cogently suggested that the new southern trade routes were a decisive factor behind the mounting Assyrian aggression against southern Babylonia and Elam and, on the other hand, the emergence of the coalitions of various southern polities (Gibson 1991). The crucial difference, however, is that the fall of Nineveh did not impact the southern network in the way it impacted the northern one; on the contrary, one may plausibly project that it profited from the sudden break of Assyrian military and political pressure. The manifold contacts between Elam and Babylonia in the post-Assyrian period (Zadok 2011) should certainly be evaluated against this background. The fact that the chiefs of Samati – perhaps no more than a successful yet local agro-pastoralist tribe in late seventh or early sixth-century southern Lorestān – could amass the amounts of silver nowadays known as the Kalmākarra hoard strongly implies access to interregional trade networks in which, for example, wool and textiles could be merchandised. The incredible richness of the princely Arġān and Ġūbaġī tombs, roughly from the same time, conveys a similar impression of profitable economic circumstances. References to deliveries of myrrh and frankincense in the Acropole archive, the find of Levantine *tridacna* shells at Susa, and the presence of cotton in the Arġān tomb all fit the hypothesis of a developing trade network (see Henkelman 2017b: 60–62, with references). It is not a far stretch to project that the cultural and social dynamic associated with this network would have become a major factor in the rise of the Persians and the emergence of their empire.

Insofar as it refers to the southern Zagros – and not to a homonymous (and partly contemporary) polity in the Kermānšāh region – the toponym Parsu(m)a(š) may with some confidence be taken to point to early or proto-Persians in southwestern Iran (Rollinger 1999, responding to Miroschedji 1985). To be sure, the geographical context given in the Assyrian sources is at times too ambivalent to allow secure distinction. Šutruk-Nahhunte II's plea to [...]yā of Parsumaš to mobilize his troops makes much more sense, however, if it refers to the southern Zagros (SAA 15 129:6–9; 707 BCE; cf. Fuchs and Parpola 2001: lii n.102). A similar case can be made for Parsuaš joining the Elam-led coalition at the battle of Ḫalulê (691 BCE; Grayson and Novotny 2012: 259 s.v. Ḫalulê; cf. Waters 2000: 34f.). There, under general command of an Elamite *nāgīru*, Elam, Parsuaš, Anzan, Pašīru and Ellipi (plus a series of Chaldean and Aramean districts) stood up to the Assyrians, suggesting that southwestern Iran at this point was as diverse a landscape as northwestern Iran in the ninth century (cf. Potts 2005: 22; Henkelman 2011a: 600 n.65). But around the turn of sixth century BCE, *Parsip* (Elamite pl.), in analogy to 'Medes,' seems to have emerged as the dominant ethnicon in relation to the highlands, as revealed by its use in the Acropole archive from Neo-Elamite Susa and in the Palace archive of Nebuchadnezzar II (an alternative label 'Anšanite' does not occur). Still, its typical combination, in the Acropole archive, with a toponym suggests a range of local identities rather than a fully formed and harmonized sense of being Persian (Henkelman 2011a: 603–610). It is only with Cyrus that one can begin to speak of 'Persians'

tout court, again not unlike the Medes under Cyaxares and Astyages.

The aforementioned Acropole archive shows that the eastern Zagros piedmonts, including the royal city of Hidali, remained under control of the Susa-centred late Neo-Elamite state. It was this zone that retained an important settled population throughout the Neo-Elamite period, presumably partly because it lay beyond the scope of the Assyrian incursions into Elam and had gained vital strategic importance (Carter 1994; Carter and Wright 2003; Moghaddam and Miri 2003; 2007; Henkelman 2008: 41–43; Waters 2013: 482f.). Significantly, Hidali, Huhnur/Hunar, Kurdušum and other places in the same region were under control of the Pārsa administration at the time of Darius I. Hidali, erstwhile bulwark of the Elamite crown, appears to have remained the region's central town, yet it was now integrated into a network centred on Persepolis (Henkelman 2017b: 97–99). What this suggests, more than simple military conquest, is a progressive westward 'Persianisation' in the context of ethnogenesis (Henkelman 2011a, 609f., 613f.; cf. Basello s.d. 1). In archaeological terms, the process may, with due caution, be recognized at Tol-e Nūrābād, where a continuous stratigraphy from Neo-Elamite II to early Achaemenid is in evidence (Potts et al. 2009/1388: 38f., 72f., 77f., 181; cf. McCall 2013 on the surrounding Mamasanī district).

At the same time, the piedmont zone is likely to have played its role in a process of secondary state formation, again in analogy with the Median case, and probably coinciding with the process of ethnogenesis. Mid-seventh century references to Parsumašians appearing at Hidali and, perhaps, attacking Šallukku/Šullaggi (ABL 961, 1309, 1311+; see Waters 1999: 103f. and 2000: 59f., 74) suggest that it was in this region that early or proto-Persians were first confronted with an urban Elamite culture. It may have been here that such elements as Elamite script, (written) language and bureaucratic protocol were adopted for the purpose of administration (cf. below). The importance of the contact zone may in fact be recognized in the very name the Persians gave to 'Elam,' as *Ūja-/Ūvja-* is arguably a cognate of Οὔξιοι (cf. Οὔξια, Οὐαζαίνη), the name of an (Elamite-speaking?) ethnos in the Zagros piedmonts region (Henkelman 2011b: 10f.).

The name as well as the title of Kuraš, King of Anšan, better known as Cyrus the Great, fit the background outlined above, as both point to a milieu in which Elamite culture was seen as prestigious.

Apart from a very early occurrence (*kūr-áš*, Ur III), at least five individuals named Cyrus occur in the sources from the seventh and sixth centuries BCE: 1. ^m*ku-ra-áš*, a kinglet of Parsumaš (Annals of Assurbanipal, 639 BCE); 2. [^{BE}]^r*ku-ráš* the Anšanite, son of Šešpeš (Elamite seal inscription, late 7th cent.); 3. ^m*ku-ra-áš* of Anšan, grandfather of Cyrus (*Cyrus Cylinder*, perhaps identical with 2.); 4. ^{BE}*kur-ráš*, recipient of manufactured items at Neo-Elamite Susa (Susa Acropole archive, early sixth century); 5. ^m*ku-ur-ra-šú*, father of Mardû (promissory note, Babylon, among mostly Elamite names, 541/40); 6. ^m*ku-ra-áš* of Anšan, founder of the Persian Empire (Elhulhul Cylinders of Nabonidus, *Nabonidus Chronicle*, *Cyrus*

Cylinder, etc.; Zadok 1976: 62f.; Schaudig 2001: 709; Waters 2004: 94; Tavernier 2011: 211f.). The consistency in rendering the name's ending (-aš) is eye-catching; it continues among the hundreds of Babylonian legal records dating to Cyrus (^m*ku-ra-áš*, ^m*ku-raš*, ^m*kur-ra-áš*, etc.; never -uš; Tavernier 2007a: 528–530). The alternative form, *Kuruš* is restricted to Old Persian (*k^u-u-r^u-u-š*) and occurs only in Bīsotūn (c. 520 BCE), and the short inscriptions that Darius had made in the name of Cyrus at Pasargadae (Stronach 1990; *pace* Vallat 2011: 277–279); the Elamite and Babylonian versions of all these inscriptions again have *Kuraš*.

The layout of the evidence on the name of Cyrus does not warrant the conviction with which an Indo-Iranian etymology has been and still is defended (see, e.g. Schmitt 2009: 102f.). On the contrary, it pleads compellingly against the (often implicit) assumption that *Kuruš* must be the prius and *Kuraš* only a derivative variant. If it were, one would have to provide solid arguments to accommodate not only the rendering of an original *Kuruš* as *Kuraš* – for which there are no phonological or morphological grounds in Elamite or in Akkadian – but also for the diachronic, cross-cultural and multilingual consistency of this supposed “Umdeutung des genuin iranischen Namen” (Schmitt 2009: 102f.). Such arguments have hitherto not been advanced. As Andreas (1904: 93f.) already observed, an adaptation *Kuraš* > *Kuruš* would be well explicable in Old Iranian context, where *ā*-stems do not have a final -š, but *u*-stems do. In short, the sources favour, *a priori*, analysis of *Kuraš* as an original Elamite name, only later adapted to *Kuruš* to match Old Persian morphology. The availability of a credible Elamite etymology based on a familiar name type ([theonym] + verbal form, abbreviated, as often in the Neo-Elamite period) reinforces this view (cf. Henkelman 2003a: 194f.; Tavernier 2011: 211–212). Additional support comes from the name of Cyrus's ancestor Teispes, the oldest attested form of which is *Šešpeš* (seal inscription of *Kuraš* of Anšan); this name, too, can plausibly be explained as Elamite and belonging to the same type (Henkelman 2014: 21, with correction in 2017a: 292f. n.34).

Andreas deserves credit for his lucid comments on the name of Cyrus, but that should not exonerate him for the all too familiar sin he appended to these, that of taking linguistic phenomena as a direct reflection of a historical reality (“*Kyros ist also kein Perser gewesen*” [emphasis original]; Andreas 1904: 93). Lehmann immediately protested against this facile identification of name and ethnicity (be it on the grounds that “er unmöglich glauben könne, dass Kyros kein Arier gewesen sei”; Andreas 1904: 98), suggesting, instead, that the Elamite name might have resulted from intermarriage. It is interesting to see that exactly the same discussion re-emerged in recent decades: as the Elamite interpretation of the name and title of Cyrus gained traction in the 1990s and 2000s, some took these elements as markers of a distinctly Elamite (or Anšanite) cultural identity, hence opposed to the explicitly Aryan-Persian identity proclaimed by Darius and his successors.

The suggested opposition may well be illusory. Cyrus, for one, gave at least three of his children Iranian names (Bardiya/Bṛdiya-, Artystone/*Rtastūnā- and Atossa/*Hutauθa-). At the

very least, his family onomastics show a mixed picture, not unlike that of the Neo-Elamite chiefs of Samati in the Kalmākarra inscriptions (Henkelman 2003a: 22–24; Tavernier 2011 index s.v. Kal.). If anything, the Elamite name Kuraš, certainly if seen as a dynastic name, betrays its mixed Elamite-Iranian cultural context. Perhaps it additionally reflects an appropriation of a prestigious tradition, but this is uncertain. The title of Cyrus invites similar reflections, be it that it presents a stronger case for wilful adoption.

One way to understand “King of Anšan” in the *Cyrus Cylinder* and other Babylonian sources is to take it at face value. After all, at the time of the battle of Ḫalulê (691; cf. above), southwestern Iran as seen by the Assyrians was still a mosaic of polities, including Parsuaš and Anšan. Potts initially took this as a lead argument in positing that Cyrus had actually been king of Anšan, a polity that, as opposed to Parsuaš and others, was “culturally *Elamite*, not Persian” (emphasis original) and whose inhabitants had an Anšanite identity (Potts 2005: 16f.; cf. 2011: 41; modified in 2016: 304f.). Zournatzi, in a recent reaction, alternatively suggested that the title “king of (the city of) Anšan,” whatever its precise background, was merely intended to cater to a Babylonian audience. As a royal style it was in fact “alien to his own practice,” not unlike Darius’s adoption of Egyptian titles in the hieroglyphic inscription on his Susa statue (Zournatzi s.d.; see also Stronach 2013).

The Anšanite titulature of the Teispid line is not limited to Babylonian contexts: it occurs in the inscription on the seal of “Kuraš of Anzan, son of Šešpeš” (for the reading ^{AŠ}*an-za-an-ir-ra* see Henkelman 2008: 55f. n.135; Elamite seal inscriptions often include peculiar sign shapes). Garrison’s broad contextualisation of the seal image, now known from about 20 impressions in the Fortification archive, has established beyond doubt that it belongs to the second half of the seventh century, that it has important connections with late Neo-Assyrian art, but itself belongs to an Iranian context. He also argued for a highland rather than a Susiana milieu for this particular glyptic style, perhaps even “a nascent ‘court style’ associated with the Teispid royal house” (Garrison 2011, citation p. 400f.). At any rate, Elamite elements are evident: apart from the Neo-Elamite seal inscription, the motif of the broken bow has clear Elamite associations (so Waters 2011: 290f.).

The short seal inscription mentioning “Kuraš of Anzan, son of Šešpeš,” although it does not mention the word ‘king,’ strongly implies rulership of Anzan/Anšan. Whereas Cyrus, in 539 BCE, may well have been aware that the title “king of (the city of) Anšan” would reverberate with a Mesopotamian audience, the claim of rulership of Anšan in itself was a datum within the Teispid line long before his conquest of Babylon. From this perspective, it is understandable that Potts presents the seal of Kuraš of Anzan as significant evidence (Potts 2005: 12f.), whereas Zournatzi credits it with little authority (Zournatzi s.d.).

Contextual analysis of the impressions of the seal of Kuraš of Anzan in the Persepolis Fortification archive (siglum: PFS 0093*) shows that it was used by a chief agent of the crown in sealing receipts for animals procured from the Persepolis economy for the royal table. The

seal, therefore, belonged to a narrowly defined court context. Not coincidentally, the closest parallel, PFS 0007*, used by the official procuring all other food commodities for the court, is a so-called royal name seal stating the name of Darius (Garrison 1996; 2014: 70f.; Henkelman 2010; 2011a: 581). Both seals were deployed, in the most literal sense, ‘in the name of the king,’ be it in that of the reigning monarch, or in that of a perceived distant predecessor with whom he sought to associate himself. Being exposed to administrative contexts wherever the court halted, the heirloom seal that had originally belonged to Kuraš of Anzan became an emblematic argument underscoring Darius’s dynastic claims, not unlike the posthumous ‘Cyrus’ inscriptions in Pasargadae. The historic significance of the seal is therefore not in doubt. In fact, its central, narrative and legitimizing role need not have commenced with Darius: for the Teispids, too, the heirloom may have suggested a concrete connection to a distant past, to a founding hero, Šešpeš, of whom little was known. Some would even suspect that the suspiciously clean and straightforward genealogy Cyrus presents in the *Cyrus Cylinder* (son of Cambyses I, grandson of Cyrus I, descendant of Teispes) was inspired by the very seal of Kuraš of Anzan, son of Šešpeš (so Henkelman 2011a: 602f. n.71).

With the seal of Kuraš of Anzan, a third, specifically Elamo-Iranian, reading of the title ‘king of Anšan’ comes into sight. Although not attested for every Neo-Elamite king, it is clear that the old title ‘King of Anšan and Susa’ still resonated in Elamite context in the seventh century and possibly, if the re-dating of Atta-hamiti-Insušnak is correct, all the way down to c. 520 BCE (Tavernier 2004: 22–29; 2006; Henkelman 2008: 6–8, 13f., 362f.). Cultural and chronological proximity forbids disconnecting the early Persian claim of rulership of Anšan/Anzan from the Middle and Neo-Elamite title ‘King of Anšan and Susa.’ There is little doubt that the adoption of a royal style referring to Anšan/Anzan would, in the late Neo-Elamite age, have been understood to stand in rivalry with the Elamite kings whose rule had effectively become confined to Susa, Khuzestān and the Zagros piedmonts. Simultaneously, it would have expressed a pretended link to the prestigious line of those same Neo-Elamite kings, whose names, styles and copying of Middle Elamite inscriptions in turn betray a strong historical orientation. It should be noted, in this context, that Anšan cannot have been a major, central town at the time. Whereas the archaeological evidence is inconclusive (only part of Tal-e Malyān has been excavated), the scarcity of references in both the Acropole and Fortification archives should not be ignored. Since ‘Persian’ seems to have become the dominant ethnicon in this period (whereas there is no evidence for ‘Anšanite’), the reference to ‘Anšan/Anzan’ in the Teispid titlature can hardly be read as a mere geographical marker. Instead, it was a conscious strategic, ideological choice, a ‘deliberate archaism’ (so Henkelman 2003a: 193f.; cf. 2008: 55–57; Waters 2004: 94; Potts 2011).

Cyrus and his contemporaries arguably considered themselves Persian, but they lived in a time when Elam and Elamite culture were still important referents and in which a royal style referring to Anšan/Anzan would have reverberated widely. With the emergence of empire

and the inclusion and consolidation of vast Iranian-speaking territories, the focus, naturally, shifted. Darius's choice to emphasize that he was 'Persian' and 'Aryan' (i.e. Iranian-speaking) does not constitute a radical break from this perspective but the maturing of an ethnic identity (Henkelman 2011a: 610–614).

Just how complicated the construction of a Persian identity was is illustrated by two other, be it ephemeral, rulers of southwestern Iran. One, Āçina son of Upadarma, rose in Elam or part thereof at the time of Darius's accession, claimed kingship over Elam, was labelled an Elamite in the Elamite and Babylonian versions of Bīsotūn, but had an Iranian name and patronymic (DB_e I.56–60, 63–65; DB_b 29–33; cf. DB_p I.72–77, 81–83). The other, Martiya, son of Cincaxriš (both names presumably Iranian), resided in Kuganakā in Pārsa, yet rebelled in Elam and took an Elamite royal name, Ummanuš (i.e. a theophoric name containing 'Humban' – DB_e II.4–8; DB_p II.8–13; DB_b 41f.). These cases show that the process of acculturation, or indeed of Persian ethnogenesis, was an active and wide-reaching phenomenon even around 520 BCE, stretching into territory that was then still seen as 'Elamite' (Henkelman 2003a: 183f.; Potts 2016: 315f.; for the names see Tavernier 2003: 247–250; 2007a: 12 [1.2.1], 15 [1.2.12], 20 [1.2.24, .28]).

The original residence of the rebel Martiya, Kuganakā (Kukkannakan, Kugunakka), evokes another element of possible Elamite-Iranian continuity. The place was not, as one might suspect, located somewhere in the transitional zone between Fārs and Khūzestān: well-attested in the Fortification archive as 'Kuknakkan,' it appears to belong to the district of Tirazziš (ancient Šīrāz). Like Matannan, which must have been relatively near, it was the site of an estate (*ulhi*, lit. "house") of queen Irtašduna (*R̥tastūnā-, Artystone), daughter of Cyrus. Matannan had been developed as a palatial site under Cambyses and this may have been the reason why Darius (re-)granted it to his Teispid wife (Henkelman and Kleber 2007; Henkelman 2010: 698–703). Kuganakā/Kuknakkan seems to have had a similar fate: the seat of a powerful and presumably noble Persian with political aspirations in 'Elam' (i.e. the eastern part thereof?) at the time of Darius's accession, it was subsequently granted to Irtašduna (Henkelman 2017b: 196–198).

As evidence from Bactria, Arachosia, Egypt, Babylonia and the Persian heartland demonstrates, the phenomenon of the landed-estates held by the imperial élites and the higher ranks of the bureaucracy (thus remunerated for their service) was common all over the Achaemenid Empire. Estates were not only essential economic assets (for the holder) and an effective means to develop the provinces (for the state) but also emblems of social prestige and, as Stolper puts it, 'determinants of political behavior' (Stolper 1985: 52; cf. Briant 2002: 444–446, 460–463, 943, 945; Henkelman 2017b: 165–167). Also, especially the larger estates and domains (in the sense of collective assets of an individual or family), constituted their own household economies, as references to dependent workers, accountants and storage facilities make clear. For all these aspects, the question as to the origin and antiquity of the

phenomenon is a vital one, as it potentially relates to the formation of Persian élites and, with that, to the evolution of early-Persian society.

In the Fortification archive, the most frequently used term for estate is *irmadim* (or *irmatam*, when reading GIM with an Elamite value *tam*₀), reflecting Old Iranian **r̥mātam* (Tavernier 2007a: 447 [4.4.12.10]; Henkelman s.d. 1). This term is once found in the Acropole archive from Susa. In MDP 9 109, various items are distributed to three individuals: Huban-danna; Ubukra, wife of Huban-rašma; and Huban-rašma himself (Scheil 1907: 98f.; Tavernier 2011: 207). The name of the last recipient is followed (l.13) by *ir-mad-dīm*, which either indicates the place of delivery or identifies Huban-rašma as holder of an estate. Hinz concluded from this single reference that the Iranian term must refer to a Persian concept adopted by the Elamites; that all Persians and people with Iranian names receiving items in the Acropole archive were estate-holders; that they were under obligation of military service to the Elamite crown; that they were the avant-garde of much larger waves of Iranians, who would eventually take control of Elam on their path to their glorious, predestined future (Hinz 1987, esp. 130–134; cf. 1973: 60–63). These inferences are entirely unsubstantiated and of little consequence in the debate, except for the observation that the term *irmadim* occurs in a Neo-Elamite archive that indeed contains Old Iranian onomastic material (Tavernier 2011). This appears to suggest that the phenomenon of estates – somehow bound to the central authority of Susa and therefore explicitly mentioned – existed around 600 BCE. Its social setting, it may be assumed, was the accultured Elamite-Iranian world of that time, hence the occasional appearance of an Iranian term.

There may be other evidence, though it is admittedly circumstantial. Irdabama, queen and perhaps mother of Darius, had an estate (*ulhi*) at Šullaggi, a town in eastern Khūzestān. This economically very active and powerful woman sealed letter orders and other documents in the Fortification archive with her privy seal, an heirloom belonging to the same group as the seal of Kuraš of Anzan (PFS 0051; cf. below). Yet another such heirloom seal was used by her agent, Rašda. It is this last seal, PFS 0077*, that shows an audience scene with a seated female; its Neo-Elamite inscription reads “Šeraš, daughter of Huban-ahpi.” Henkelman suggested that this last Huban-ahpi is the same as the ‘Huban-ahpi of Šullaggi’ in the Acropole archive. If so, a hypothesis can be made that Huban-ahpi not only fathered Šeraš, but also was an ancestor of Irdabama and that for this very reason Irdabama held an estate at Šullaggi, that is, in analogy to the estate Matannan held by Irtašduna as leading member of the Teispid line and successor to Cambyses and Bardiya (Henkelman 2011a: 613). In such a scenario, one could picture Irdabama and her family as prestigious (part of the old Elamite élite), rich (having an estate or lands at Šullaggi), and taking part in the Elamite-Iranian acculturation (Irdabama is an Iranian name), hence an attractive party for a Persian like Hystaspes (if Irdabama was indeed Darius’s mother). Though this reading of the evidence remains speculative, it signals the potential relevance of landed estates in the transition from Neo-Elamite to early-Persian society.

The seal of Kuraš of Anzan is, as Garrison has shown, exceptional, but not unique (Garrison 2011). It belongs to a small group of seals, all known from impressions in the Fortification archive, which otherwise includes the seals of Irdabama and her agent (PFS 0051, PFS 0077*) and a seal showing a seated deity (PFS 1308*, cf. below). As pointed out earlier, the critical locus of this glyptic was probably in the Neo-Elamite or early-Persian (Garrison: Anzanite) highlands. While reflecting wide cultural associations, the seals were local products made in and for an Iranian milieu.

Beyond their art-historical significance, the four heirloom seals also have important historical implications. Their very existence points to a need for authentication and expression of jurisdiction in written context. This context presumably was an adapted form of Neo-Elamite cuneiform writing (as the seal inscriptions also imply). That there are at least four such seals, apparently all handed down in royal or élite contexts, implies a social stratum, rather than one exceptional individual, that had adopted the use of these instruments. If one, with Garrison, associates the glyptic tradition under discussion with the early Teispids and their milieu, it follows that this early-Persian acculturated society of the late seventh century engaged in (Elamite) writing and presumably played a pivotal role in emerging bureaucratic and administrative structures.

The view presented here matches well with the fact that the Acropole archive, which is only one or two generations younger, evidences an intricate administrative network including the Zagros piedmonts and co-opting various groups of *Parsip*, “Persians” and individuals with Iranian names. Given the overall dynamic of secondary state formation and the impact of the sedentary zone of eastern Khūzestān, it is entirely unsurprising that administrative structures would develop in the regions directly adjacent. The Acropole archive yields glimpses of this process as it happened. The seals of Kuraš of Anzan and his contemporaries are concrete testimonies to the same effect but carry more weight given their continued use, as heirloom objects, in the mature administrative contexts from the reign of Darius.

Incidentally, one of the seals regularly impressed on tablets in the Acropole archive has an inscription that can tentatively be read as “Andada son of king/chief Taššek” (see Garrison, Chapter 32 this volume; not retrograde, despite Vallat 1995). Taššek seems to be an Iranian name (*Dāθayak-; Tavernier 2011: 198). The fact that nothing else is known about this person shows the level of our ignorance but also the potential scope of Elamite-Iranian acculturation, notably in administrative and bureaucratic contexts.

In a 1978 paper, Stolper showed that the appellative ^{lú}šá-ár-nu-up-pu, occurring in a single Neo-Assyrian letter (ABL 281), reflected Elamite *šarnup, which he explained as ‘intended recipients of rations apportioned’ and which he connected to the verbal base šara-, ‘to apportion,’ one of the key terms of the Fortification and Treasury archives (Stolper 1978, despite De Vaan 1998: 72–73). The letter in question speaks of workers who depend on rations (*ina libbi balṭū*, ‘they live on it’) that are issued by a centralized redistributive household

economy that managed a large territory. The connection with the ‘Persepolis economy’ of the reigns of Darius I, Xerxes and Artaxerxes I is therefore not only etymological but apparently also generic in nature. In Persepolis, too, large numbers of dependent workers, *kurtaš*, formed the backbone of a regional institutional system; their dependence is similarly expressed by the frequent addition *gal makip*, ‘consuming rations’ (Henkelman 2008: 18f.).

A fleeting reference in the preserved Constantinian *Excerpta* of Nicolaus of Damascus states that, among the Medes, any pauper may subject himself to a rich man for nourishment, be fed and clothed, and henceforth be regarded as equal in status to the latter’s slave (F66 §2, presumably in turn based on Ctesias, F8d §2 Lenfant). This information, given in the context of the Cyrus legend, may refer to a phenomenon documented in developed form in primary sources from the Achaemenid period. The most evolved version is that of the aforementioned dependent labourers, *kurtaš*, of the household economy of Persepolis, who received about two-thirds of their nutritional needs from the state (Henkelman s.d. 4 §2.5). In this setting, the term signifies state-dependency. The underlying Old Iranian word, *grda-*, ‘domestic servant’ points, however, to an origin in actual household contexts (cf. Av. *gərəda-*, ‘house, dwelling,’ Skt. *grhá-*, ‘house, property,’ Eng. *yard*, Germ. *Garten*, etc.; see Tavernier 2007a: 423f. [4.4.7.54]). Egyptian (Aramaic) and Babylonian sources from the Achaemenid period take an intermediate position as they use *grd’/gardu* in connection with estates, hence in semi-public contexts (Stolper 1985: 56–59; Briant 2002: 455–460, 944f.; Tuplin 2013: 43, 75–77, 101f.). The same seems true for the Elamite version of the Bīsotūn inscription, where Darius claims to have restored to the free and able-bodied men (*taššup*) their livestock and *kurtaš* (as well as the ‘house/estate-subjects’; DB_e I.49; DB_p I.65 has *māniya-*, ‘house personnel,’ DB_b 26 lú_hUN.Gá^{meš}, ‘hirelings, hired labourers’). It would not be surprising if an Elamite redistributive economic model involving larger forces of dependent labourers impacted early Persian society, more precisely the status and deployment of *grda-* workers. This idea would gain strength if, as suggested, estates played a role in the transition from Elamite to early-Persian society.

The most important elements in the dossier on administrative heritage have hitherto only been mentioned in passing: writing and language. That Elamite was important in Achaemenid context is easy to establish. The Fortification and Treasury archives from Persepolis bear witness to it, as do isolated texts from Achaemenid Susa and Qandahār (Arachosia). Elamite originally was the only language of Darius’s Bīsotūn monument; the Old Persian and Akkadian versions were added at a later stage. For the early Persians, as also appears from the inscriptions on the seals of Kuraš of Anzan and his contemporaries, writing first and foremost meant writing in Elamite (cf. Stolper 2005: 20).

Writing in Elamite, in the days of Darius I, furthermore meant writing in a script that continued developments peculiar to Elamite cuneiform and occurring from about 650 or 600 onwards. These characteristics include a progressively reduced sign inventory and the

adoption of particular writing rules (disharmonious spelling, conventions to render Iranian diphthongs). Late Elamite script is, moreover, visually distinct from Mesopotamian cuneiform of the same period, a difference that was recognized in antiquity. At Bīsotūn, for one, the Elamite and Babylonian versions consistently use signs that are distinct in shape and morphology and thus give very different aesthetic impressions (cf. Stolper 2005: 20; s.d.).

The observation that an indigenous school of cuneiform writing existed and continued from Neo-Elamite into Achaemenid times has further implications. The ascending view on the genesis of the Old Persian script holds that the distinct tradition of Elamite cuneiform provided the main inspiration, presumably among scribes themselves versed in Elamite writing (D’Erme 1990; Rossi 2005; Basello s.d. 2). Just how crucial the impulse from Elamite writing was appears from the Old Persian word for ‘inscription, tablet,’ *dipi*, a loan from Elamite *tuppi* (pronounced /tipi/; Tavernier 2007b [it ultimately derives from Sumerian]).

Who wrote in Achaemenid Elamite, and why? In the *Landnahme* model mentioned at the beginning of this chapter, the conquering Persians are assumed to have deployed Elamites as their clerks, not bothering to engage in writing themselves. An extreme version of this hypothesis held that written Elamite cuneiform was actually no more than a code for spoken Old Iranian (alloglottography: Gershevitch 1979; cf. Hinz 1971: 271, 308f.). More recently, and in line with of model of Elamite-Iranian acculturation, Achaemenid Elamite has been characterized as a morphosyntactically restructured form of the language resulting from second language acquisition by native speakers of Old Iranian (Henkelman 2011a: 586–595, 614–622; Yakubovich 2008: 207). This view agrees with the observation that when, occasionally, the ethnicity of the Persepolis scribes needed to be made explicit (to distinguish them from Aramaic scribes), they were called ‘Persians,’ not ‘Elamites’ (Henkelman 2008: 348–350; 2011a: 587f.; Henkelman and Stolper 2009: 275–278).

Achaemenid Elamite, perhaps more properly described as ‘Irano-Elamite,’ not only contains numerous Iranian loanwords but betrays imposition of grammatical features from Old Iranian. An example is the ablative use of the Elamite separative suffix *ikkimar*, a grammatical calque on *hacā*, ‘away from, by,’ with the same dual function. Other signs of language interference are the use of the relative pronoun as article and the completion of the sets of the demonstrative pronouns with ‘here’ and ‘there’ deixis in conformity with the Iranian paradigms. All such changes increased isomorphism between the two languages and thus facilitated code switching. More generally, reduction of morphosyntactical complexity made access to the contact-induced form of the Elamite language much easier, notably in those areas of the grammar that were very distinct from Old Iranian (and other Indo-European languages). The best example in this regard is the radical generalisation of a single suffix (*-na*) for all attributive constructions, replacing the more complex system of gender suffixes expressing person, number and gender.

The late, morphosyntactically restructured form of Elamite is unlikely to have emerged

among native speakers of the language: the changes that occur are too radical for such a scenario and rather point to the agency of iranophones. At the same time, as always, the language interference was not a one-sided process. Adaptation of Iranian loanwords to inherited Elamite morphology also occurs, and this phenomenon is typical for the agentivity of native speakers. Adaptation to native morphology was concentrated in the western Fahliyān region. In this same area, presumed to have had a stronger presence of native or near-native speakers of Elamite, there is a clear preference for Elamite technical words and month names instead of Old Iranian equivalents. The scribes that belong to this profile form a minority of 10–15%, however: the main body of the administrative personnel must have been iranophones. They used Elamite in a situation of asymmetrical bilingualism, expressing themselves reasonably well in Elamite in administrative matters but probably less so in other settings.

Common sense suggests an intimate connection between the introduction of Elamite writing on the one hand and administrative structures and bureaucratic protocol on the other: introduction of script as an abstract skill, without its practical basis, seems unlikely. If more complex forms of administration, involving the use of seals and script, indeed started to emerge among the early Persians in the seventh century BCE or even before, the adoption of the Elamite language as a language of writing may well have occurred at the same time. This does not mean, however, that the Persian use of Elamite was necessarily limited to bureaucracy. It may well have been used in the increasing contacts between iranophone highlanders and the Elamites of the contact zone of the Zagros piedmonts. Indeed, the *Parsip* approaching representatives of the Neo-Elamite state at Susa, Hidali and elsewhere would hardly have made themselves understandable by speaking Iranian.

A long-term scenario, whereby Elamite was in use among Persians for more than a century before the reign of Darius, would account for the relative stability and coherence of the contact-induced variety of the language as documented in the Persepolis archives. Yet a later date and more restricted setting for the genesis of Achaemenid Elamite is certainly not excluded. In that case, adoption of Elamite would have been a means to meet with the rising complexity of Persian society under Cyrus or his immediate predecessors and would have enabled the administrative structures necessary for, as an example, the great building projects at Pasargadae and Taoce. In both scenarios, one expects a continuity of administrative jargon and details of bureaucratic protocol from the Neo-Elamite to the Achaemenid period. Here, however, we reach the limits of the evidence at hand.

As remarked at the start of this chapter, Elamite administrative corpora from different periods are rarely comparable in terms of genre, bureaucratic level and administrative perspective. The detailed comparison, undertaken by Basello, between the Neo-Elamite Susa Acropole archive (manufactured items) and the Persepolis archives (livestock, food commodities, silver payments in lieu of rations in kind) yielded few parallels. Not a single

formulaic expression is carried over from the Neo-Elamite to the Achaemenid corpus, and the general level of convergence is limited. The most significant evidence is probably the shared use of the key term *kurman* (identifying the officer ‘handling’ the items/commodities in the recorded transaction), which may continue a tradition going back to Middle Elamite times. That the evidence from divergent terminologies should not be taken as an absolute verdict is shown by a few minor categories as well as by exceptional texts spilled over from other branches of administration into the Fortification archive. The format of tablets regarding exchange of surplus (*sut*) is strikingly similar to that of a particular range of tablets in the Acropole archive. A single text on manufactured items (PF 0335) is, by a number of standards, much closer to the Acropole corpus than the average Fortification text (Basello 2011; cf. 2012a).

Elamite script and language, it should be underlined, were not *Fremdkörper* in their new setting: they had become Persian things that Persians used. Not only did Persians adopt Elamite as their way to communicate in writing, especially in the context of administration, and not only did they unconsciously impose features of their mother-tongue onto it, but they also rendered it more Persian in the particular use of inherited features. The increased deployment of phonetic complements (*matres lectionis*), for one, would have especially aided iranophones. More important from a cultural perspective is the extended use of determinatives, particularly the one for divinity (^{AN}). In Achaemenid Elamite it is applied not only to divine names, but also to temples, rites, priests, days, months and so on, hence reflecting a world-view informed by (Indo-)Iranian tradition. Such adaptations point to a community of iranophone scribes who felt themselves at home in the language of writing. Some even mastered the language well enough to be inventive; the prime example is the production of abbreviations, a kind of new ‘logograms,’ from Old Iranian loanwords (such as *pa*^{MEŠ} for *banura* = **panīra-*, ‘cheese’).

Potts rightly pointed out that the technical skills, garment styles or such heirloom forms as the ‘Elamite dagger’ by themselves need not spell a very profound Elamo-Iranian acculturation. In a minimalist approach, as he surmises, one would consider all these as ‘epiphenomena ... which fail to convince one of any meaningful Elamite contribution to the idea of Iran or Iranian identity’ (Potts 2005: 11–13). Potts’ answer was to point out the significance of Cyrus’s name and title, as discussed above. Today, after a decade of intensified research on Elamites and Persians, one can be more confident and count writing and religion among the areas of significant contribution. The first, as argued here, came in a context of emergent administrative structures among the early Persians and was internalized as part of Persian culture.

Recent work has shown that institutional networks of the Persepolis type existed at Achaemenid Susa and Ecbatana, and that Elamite (alongside Aramaic) was used at these centres. A similar argument can be made for a range of other places, including Taoce, Gabae

and Kṛmāna (Kermān), suggesting that most of the western Iran plateau was covered by such networks (Henkelman 2017b: 109–149). All this could still, with some effort, be explained as an organic growth of an inherited Elamite model which the Persians adopted and expanded. The Elamite Arachosian tablets and other evidence from Achaemenid Arachosia, however, forcefully point to another explanation: that of Persians conceiving the inherited institutional economy as a *system* that they could advantageously use as a template for setting up complex administrative and bureaucratic structures in areas where these were absent or underdeveloped (Fisher and Stolper 2015; Henkelman 2017b: 150–174). Elamite writing, bureaucratic protocol and administrative tradition, then, were not epiphenomena in a brave new Persian world but essential tools for building and organizing it. For sure, the Achaemenids were quick to acquire a whole range of other means and mechanisms to further and sustain their empire, but the Elamite contribution, adopted and adapted in a truly Persian society, provided the original impetus.

The historical panorama stretching from the seal of Kuraš of Anzan to the use of Elamite at Achaemenid Qandāhar leaves no doubt as to the internalisation of bureaucratic and administrative traditions by the Persians. The evidence on Elamite elements in Persian religion allows for a similar vision: not one of ‘tolerated’ yet essentially foreign cults but of inherited traditions that were meaningfully adopted and adapted.

PFS 1308*, mentioned earlier in this chapter as one of the four Neo-Elamite/early-Persian heirloom seals known from the Persepolis Fortification archive, depicts a female deity seated on a throne, holding a mace and wearing a crenelated and horned polos headdress. Whereas a number of elements have Assyro-Babylonian antecedents, details of the composition and style point to a local background. The Neo-Elamite seal inscription points in the same direction (Garrison 2011: 387–390). The seal is attested only once; it probably belonged to a high-placed traveller by the name of Bakabadada (PF 1385). Some other individuals with Iranian names used seals with seal inscriptions stating the names of individuals with Elamite names; these seals are younger than the four heirloom seals discussed here but nevertheless of interest. A notable example is the seal inscribed with the (Elamite) name of ‘Huban-ahpi, son of Šati-Huban,’ used by Iršena (*Ršēna-), the important director of the Fahliyān region (PFS 0004*). Of this last seal, Walther Hinz, in a letter to Richard Hallock, wrote that he found it incredible that the administrator Iršena had inherited his seal from an Elamite (Henkelman 2008: 119 with n.263). This is, however, exactly the point: Elamite elements are not only absorbed but they find new meaning and context in the Persian period. The same is arguably true for the goddess on Bakabadada’s seal and, for that matter, for all deities and rites of Elamite background attested in the Fortification archive.

The latest survey of named deities in the Fortification archive, on the basis of an enlarged edited corpus, confirms a trend observed earlier: that gods with an Elamite background are well presented in the cultic landscape of ancient Pārsa. Table 39.1 lists all deities mentioned

more than once in the available sample of the archive (c. 6400 Elamite texts and fragments as of January 2017). It indicates the cultural background, the number of attestations and – important in an economic context – the aggregate volume of the deities’ sacrifices expressed in barley value (see Henkelman s.d. 2 for full data; reconstructed Iranian theonyms after Tavernier 2007a).

Humban stands unrivalled in terms of attestations and aggregate volume (6455⁺/6585⁺ l.). The latter is more than three times higher than that of Auramazdā (2171⁺/2331⁺ l.) and almost as much as that of all gods with an (Indo-)Iranian background taken together (6486⁺/6646⁺ l.). This, with the prominence of Napiriša and Adad, and with the additional presence of Earth (if the logogram KI refers to an Elamite deity: Henkelman 2008: 324–331; s.d. 3 §2.6), Nabbazabba, Šimut, Zizkurra, and Nah (Nahhunte?), shows that the significance of the Elamite element in the divine world of the Persian heartland is unambiguous. What cause controversy are the cultural inferences drawn from this circumstance.

[Table 39.1 List of deities mentioned more than once in the Fortification archive.](#)

	<i>Elamite</i>	<i>Iranian</i>	<i>attestations</i>	<i>aggregate volume: minimum</i>	<i>maximum</i>
1.	Humban		32	6455 ⁺ l.	6585 ⁺ l.
2.		Mišdušiš	*Miždušī-	7	2095 ⁺ l.
3.		Uramasda	Auramazdā	13	2171 ⁺ l.
4.	Napiriša			26	1880 ⁺ l.
5.	Adad			12	1715 ⁺ l.
6.		Išpanda- ramattiš	*Spandārmatiš/ - aramatiš	9	900 ⁺ l.
7.		Mariraš	*(H)uvarīra-?	8	450 ⁺ l.
8.		Šetrabattiš	*Šēθrapatiš	5	330 l.
9.		Pirdaka- miya		3	210 l.
10.		Narišanka	*Bṛakām(i)ya-	3	270 l.
11.	‘Earth’ (?)		*Narēsanga-	5	270 l.

One approach, in agreement with the *Landnahme* model, takes the evidence from the Fortification archive as essentially coherent with the assumption of an inherited and mature Iranian religion, more particularly of a form of Zoroastrianism (or Mazdaism, etc.). Elamite elements are seen as either tolerated yet extraneous to the ancestral religion (Hinz 1970: 427–430; 1976/1979 II: 192–202; Koch 1977; 1987; 2011: 108–137; Boyce 1982: 132–149), or as adapted to an existing structure without significantly impacting that same structure (Kellens 2012; Kreyenbroek 2012). A major problem confronting this view, especially in its more extreme form (tolerated Elamite paganism), is the relatively low rank of Auramazdā. His non-

exclusive position appears to contrast sharply with the evidence from Achaemenid royal inscriptions; it certainly diverges from traditional views on Achaemenid Persian religion.

A past remedy has been to identify the so-called *lan*-sacrifice as the exclusive rite for Auramazdā. Since *lan*, at the time, was only known to occur without explicit reference to a particular deity, and since it is frequently attested, its proposed association with Auramazdā seemed an admissible and convenient means to restore the latter's status as foremost god and bring the Fortification archive on a par with the royal inscriptions. Contextual evidence had already severely undermined this view (Razmjou 2004; Henkelman 2005: 140–143; 2008: 214–253), when a decisive counter-argument came to light in the form of several attestations of 'lan for Napiriša' (Henkelman 2017a: 283–287, 324). These do not imply that all *lan* sacrifices were made for this originally Elamite god, but it excludes analysis of the word *lan* as a scribal shorthand for 'Auramazdā-sacrifice.' With that conclusion, the image of an administration that spent more of its means on Humban than on Auramazdā returns with full force. How, then, is this situation to be understood?

The case of *lan* and Napiriša is particularly important for the question of Elamite elements in Achaemenid religion. *lan*, an inherited Elamite term for 'offering,' was part of a web of cognate forms that was important in Middle and Neo-Elamite cultic terminology and remained productive in Achaemenid Elamite (Vallat 2000; Henkelman 2008: 192–203, 241f., 254–280). A recent addition to this file is the short late Neo-Elamite inscription on one of the gold 'rings' from the Ĝūbaġī tomb, which reads *la-ar-na*, 'for/belonging to the sacrificiant.' In Persepolis, one finds, among others, the verbal base *la-* 'to offer' (especially in connection with Humban), the appellative *lan-lirira*, 'oblator' (a qualification of *makuš*) and the compound *lankul*, 'offering-prayer' (cf. *kulla-*; Henkelman s.d. 5). This rich context forbids disconnecting *lan* from its Elamite past and reading it as merely an old word for a new reality (an Indo-Iranian cult). Instead, it shows continuity of a technical sacrificial vocabulary used alongside Iranian loanwords for specific cultic phenomena.

The most consequential case of *lan* for Napiriša (Fort. 1316–101:14') is connected to Anzamannakka, a place in the so-called 'northern cluster' along the road to Media. Henkelman has argued that Napiriša's cult in this area may have been relatively new: it was brought there by Persians in the context of their extending administrative network and institutional economy, of which cultic activity was an essential component (Henkelman 2017a: 277–281, 287). Napiriša, in other words, had become a Persian god, an inference also borne out by the circumstance that he was recipient of an *akriš* (Fort. 1785–103), a rare but seemingly important celebration, the name of which is Iranian (Henkelman s.d. 3 §5).

The adoption of Napiriša's cult into, and adaptation to, its new the Persian context should be placed in a *longue durée* perspective. The overall strength of the cult in Achaemenid Pārsa may well be based on Napiriša's long-time connection with the highland parts of Elam (Henkelman s.d. 2 §2.4). Most scholars agree that the central male deity at Kūrāngūn and

Naqš-e Rostam is Napiriša (or Napiriša-Inšušinak), dispensing, as the Elamite Ea/Enki, the fertilising streams of water emerging from the deep (Vallat 2002/03: 533f., 543f.; Potts 2004: 152–154; undecided: Seidl 1986: 20f.). The fact that both open-air sanctuaries were enlarged with additional sculpture, hence still in active use in the Neo-Elamite period, is relevant here, as it allows for a direct link between the veneration of Napiriša in the highlands in the time before and that after Cyrus.

Incidentally, there is a Fortification seal (PFS 1312s) which shows (the statue) of a male deity flanked by composite creatures. One of these is a goat-fish, associated with Ea/Enki in Mesopotamia. The same creature is well attested in Elamite art, where it may be an emblem of Napiriša (Garrison 2017: 201; cf. Amiet 1994: 64f.).

The permanence in certain cults suggested in the case of Napiriša does not stand on its own. Humban's leading position among the gods mentioned in the Fortification archive, for one, clearly continues his surging popularity in the eighth, seventh and sixth centuries BCE. His role as the Enlil of the Elamite pantheon (suggested by the commentaries to *Šurpu*) is not only reflected in the many Neo-Elamite royal names with the element 'Humban' (the last one being the aforementioned rebel Ummanuš) or in Hanni of Ayapir's reference to Humban, 'under whose *kitin* a king (stands),' but also in the ideologically charged *bakadaušiyam* celebrations organized in his honour under Darius I. Not co-incidentally, Auramazdā, too, figures prominently in the same context. Although it would be reductive to postulate a one-to-one connection, there is every reason to suspect that the role Humban assumed in the later Neo-Elamite period, that of a typical royal god, informed the profile of Auramazdā as visible in the royal inscriptions (Henkelman 2008: 353–384; 2017a: 306–319; s.d. 2 §2.1; cf. Gaspa 2017).

Some have pointed out the absence of prominent Elamite gods such as Inšušinak from the Fortification archive, and even inferred from it that his followers had turned their back on him, disappointed that he had forsaken them against the Babylonians and the Persians (so Koch 1995: 1963). It is not difficult to counter this *e silentio* argument: Inšušinak's traditional ties were with Susa and the Susiana, hence with a region from which hardly any Achaemenid administrative sources are preserved (Henkelman 2017a: 281f. with n.16). The few snippets that we have, however, do include reference to the continued cult of Nanāya at Achaemenid Susa (Joannès 1990: 173–175). Late Neo-Elamite royal inscriptions indicate continued worship, at that time, of Inšušinak, Humban, Pinigir, and Napiriša (EKI 77–80, 82–84), as does the Acropole archive for Inšušinak, Šimut, Hutran, Šazi and Zizi-pahha, some of whom had several local cult centres (Vallat 2002/03: 534–536; Basello 2017: 363–367; Henkelman s.d. 6). Given the marked role of gods of Elamite descent in Achaemenid Fārs, it would be unwise to assume a dramatic rupture in the parallel case of Khūzestān, only because textual evidence is scant. More plausible is a scenario of continuity of at least some of the major cults, besides the attested one of Nanāya. One wonders, in this context, whose temple it was which was plundered at Susa during the absence of Alexander (Arrian *Anabasis* VI.27.5; see also Álvarez-

Mon 2011: 346–349 on Nabû and Marduk).

The various elements evoked with regard to the Elamite heritage in the Persian heartland religion provide the basis from which other elements may be explained. This is particularly true for aspects of Persian cultic space, cultic practice and cultic personnel, as documented in the Fortification archive and elsewhere. An important example is the duality of temple and open-air worship, which existed in Elamite and Persian culture alike.

The richness of Elamite temple culture is evident from the many inscriptions dedicated to the building and rebuilding of sanctuaries (*siyan*) throughout Elam (Potts 2010), but also from the apocalyptic tale of Susa's doom told by Assurbanipal (Prisms A VI:27–69 ~ F V:19–48; Borger 1996: 53–55, 241). In it, not only the capture of divine paraphernalia and temple property are mentioned, but also that of temple administrators (*sangē*) and cultic personnel (*buhlalē* > **puhu-lar*; Vallat 2001; Henkelman 2008: 272–274). The *Persepolis Bronze Plaque* adds to these categories that of the *puhu zīyanup*, 'temple servants,' perhaps a class of oblates (Henkelman 2008: 273f., 315). The Neo-Elamite *Šutruru Stela* (EKI 74), centring on the priest Šutruru, seems to document a complicated land grant (so Reiner 1969: 61f.; Koch 1980: 108–113; Waters 2000: 18f.). In short, economic activities of Elamite temples are alluded to in the sources; seen within the wider ancient Near Eastern context, this is, of course, anything but surprising.

The Fortification archive includes a few isolated references to temples (*ziyan*); each of these suggests an economic entity of some importance. An amount of 9405 l. wine was ordered for the temple at Hakurtiš, to give the most telling example. Perhaps the rareness of such references should be explained as a function of the relative autonomy of the sanctuaries (Henkelman 2008: 469–473, 547f.; 2017a: 287–290; s.d. 3 §3.1). If indeed they were institutional households of their own, the phenomenon may well have been informed by Elamite tradition.

Elamite and Indo-Iranian traditions shared a susceptibility to bodies of water and elevated places as numinous loci where mortal man might approach the divine. Kūrāngūn and the water-rich gorges of Kūl-e Farah and Šekaft-e Salmān are captivating examples of the Elamite tradition, but they are also of direct relevance here as they are all situated in what would become the Persian heartland (Álvarez-Mon 2013; Canepa 2013; Henkelman and Khaksar 2014; cf. Rapin 2017 on raised platforms of Achaemenid Central Asia). Since water was a key element in a number of Achaemenid monuments (Bīsotūn, Naqš-e Rostam, Gangnāmeḥ, Qadamgāh), it is tempting to postulate a connection with the Elamite past. Indeed, the Fortification archive is rich in references to river and mountain sacrifices, one of which is an offering for Humban at the river Betir ('Hostile, Adversary'). Contextual data for assigning the rites to a particular god or cultural tradition are lacking for all other cases, however. At any rate, the question of their cultural affiliation is probably moot since, in all likelihood, Elamite and Indo-Iranian traditions both contributed to the Persian rites (Henkelman 2008: 224, 377–380, 392f., 536–541; s.d. 3 §3.2).

A dossier that has emerged only in recent years is that of the funerary cult of Persian kings. Again, some of its elements point to the Elamite past.

Food offerings for the deceased are well attested in Elam, as they are in the ancient Near East in general (Carter 2011; Wicks 2015: 76–79, 93–97). Assurbanipal, in the above-quoted passage, prided himself on having deprived the royal shades of food offerings and water. The best-known individual cult, involving a statue/stela image of the king, is that of Tepti-ahar in the early Middle Elamite period (Reiner 1973, esp. 95f.). A fragmentary Neo-Elamite inscription, perhaps from Atta-hamiti-Insušnak, mentions sacrifices to be performed ‘for my statue/stela’ (EKI 89:5, *zalmu*; see Henkelman 2008: 362f.). Also relevant are clay heads, perhaps intended as portraits of the deceased, found in Elamite graves; the series continues into the Neo-Elamite period (Álvarez-Mon 2005; Carter 2011: 49). One wonders if these representations somehow connect to the statues of Elamite kings made from silver, gold, bronze and alabaster, 35 in total, that Assurbanipal seized. Mentioned in the context of the destruction of Elamite sanctuaries, they may have been votive images or the object of a dynastic cult (or both). The same is probably true for the images of deceased and living family members placed by Šilhak-Inšušinak I in the *suhter* (Grillot 1983).

Regular offerings for the statue/stela (*šalmu*) of Darius I were performed at Sippar during the reign of Xerxes (Waerzeggers 2014; cf. Rollinger 2011: 44–46). Though, presumably, continuing Mesopotamian rather than Elamite precedent, the case is important in the wider context of Persian funerary customs. To start with, an image of the deceased, and perhaps also those of the ancestors, indeed seems to have played a role in funerary rites. Classical sources repeatedly refer to such an image, lain on the royal catafalque (Hdt. VI.58.3, Ael. VH XII.64 [Alexander], Curt. III.3.16, perhaps Diod. XVII.115.1; Briant 2002: 522f., 959). Secondly, there is a series of texts in the Fortification archive on the food offerings for Cambyses, his queen Upanduš/Phaidyme and Hystaspes (Henkelman 2003b; s.d. 3 §7; Henkelman and Miri s.d.). The cultic space for such evolvments consisted of the actual funerary monument (*šumar*) and a sanctuary (*siyan*) with a *bašur*, ‘sacrificial table’ (all mentioned together in NN 2174 [collated]). That the last term, a loan from Akkadian (*paššūru*), is potentially significant as such loanwords, rare in Achaemenid Elamite, usually go back to Middle or Neo-Elamite intermediate forms (cf. AE *zip* < ME-NE *sip* < Akk. *sippu*).

As for cultic personnel: the most common designation for priest or officiant in the Fortification archive is *šatin*, continuing a term already attested in the early second millennium (Tavernier 2007c: 283f.; Henkelman 2008: 254f. n.559, 298 n.677). The majority of individuals bearing it did not have Elamite names, however, nor were they exclusively assigned to the cult of Elamite gods. Indeed, almost all of the priests tending to Auramazdā were *šatin*, not *makuš* (*maguš*). This trend is a general one: although specialisation in certain cults sometimes occurs, cultic personnel regularly tended to the rites of deities of both Elamite and Indo-Iranian background. Priests with Iranian names and designations could sacrifice to

deities of Elamite descent and *vice versa*. The terms *makuš* and *šatin* were not equivalents – *šatin* was a more precise term for sacrificial priest, *makuš* had to be qualified – but their difference cannot be construed in terms of ethnic or cultural profiles. This observation carries some weight, as the cultural traditions from which the terms *šatin* and *makuš/maguš* stem were indeed distinct (Henkelman s.d. 3 §2)

It is important to remember that the sacrifices recorded in the Persepolis Fortification archive pertain to cults that were wilfully organised by the state as part of the activities of an institutional household. These cults were for all those gods whom the Persians regarded to have a sway over their homeland: commodities allocated for their sacrifices were not philanthropic subsidies for indigenous cults. Along the same lines, places where deities of Elamite descent were worshipped, were not backward ‘enclaves.’ In fact, closer inspection of such ‘isolated’ places shows that some of them actually had a royal profile and were well connected to the rest of the institutional territory (examples: Henkelman 2008: 316–323; 2017a: 276f.).

That only an integrated approach can make sense of the religious phenomena documented by the Fortification archive is clearly shown by the following case. Since agriculture and animal husbandry were the prime supports of Persian heartland society, and since the archive pertains to an institutional context, it is not surprising that much of the documented cultic activity is related to fertility, rain, protection of the crops and stored revenue. Sometimes a series of sacrifices occurs, to be performed by the same priest in the same district (but not necessarily at the same time): the deities and rites that occur in such lists may include Adad, Napiriša, Sakurraziš, *kušukum*, *hapidanuš* and *tikrakkaš*. The last term perhaps refers to a conical granary (**tigraka-*, ‘pointed’), while *hapidanuš*, another Iranian loan, literally means ‘water place, reservoir’ (**āpidāniš*; Tavernier 2007a: 398 [4.3.220], 437 [4.4.8.3]). Sakurraziš is the elamograph of Θāigraciš, the name of the third month in the Persian agricultural calendar. In this context, Napiriša probably occurs as god of the deep waters, while Adad, who had been at home in Elam since the Sukkalmah period, presumably is invoked in his role as fertility and rain god (Lipiński 2005; cf. Henkelman 2008: 305–323, 519f.; s.d. 2 §2.5; see also Álvarez-Mon and Basello 2014). This shows, in a nutshell, the practical reality of religious life: Iranian and Elamite elements occur side by side in an agricultural setting, the basis of human existence (Henkelman 2008: 396–400, 541f.; s.d. 3 §4).

What is true for the everyday level of agricultural life, and the worries that come with it, also applies to prestigious, royal contexts. The grand sacrificial feast known as *šip* was performed at Pasargadae and other places with a clear royal profile. It was organised and presided over by the general director of the Persepolis economy or his deputy, *viz* by the king’s highest representatives in the heartland. As in the case of the *bakadaušiyam* celebrations, larger crowds must have benefitted from the generous allocations in wine, grain and livestock. Displaying generosity on behalf of the king was, in fact, a prime concern at such

a fore: it served an ideological purpose, but also had a practical side in motivating the workers with a little extra food. Unquestionably, then, the *šip* feast reflects both the way the Achaemenid monarchy wanted to see itself and the economic reality of the Persian heartland, with its expanded and multi-ethnic *kurtaš* workforce, in the age of empire.

Yet *šip*, both as a term and as a religious phenomenon, also connects to an Elamite past. The first indication for this is the single occurrence of a *šip* at the place Pumu. Apparently a more modest, local version, it was performed for the god Zizkurra, whose compound name contains a reduplication of *Zit*, ‘Luck, Well-being’ (*Zizit > *Zizt > Ziz), a theonym already attested in the *Narām-Sîn Treaty*. Secondly, the precursor to Achaemenid-Elamite *šip*, Middle and Neo-Elamite *šup*, is attested as a term for (royal) sacrifice in an inscription by Untaš-Napiriša, the Neo-Elamite *Persepolis Bronze Plaque* and other texts; it also occurs in various compounds and proper names. Finally, although we do not know its name, the sacrificial feast performed at Kūl-e Farah was arguably similar to Achaemenid *šip*, as appears from the large audience, the host of sacrificial animals, the communal banquet and other elements. If not a *šip* feast, it remains relevant as a phenomenon that may have informed the Achaemenid celebration (Henkelman 2011c; 2017a: 303–306; s.d. 3 §8; Basello 2012b: 153–156).

Although transformed in the Persian context and adapted to the needs of Achaemenid society, *šip* clearly has to be studied with due attention to the Elamite past. That past manifests itself with great force in the Elamite version of Xerxes’ *Daivā* inscription. Clearly written by an iranophone with limited command of Elamite, it nevertheless describes the veneration of Auramazdā as ‘performing his *šip*.’ In the same text, moreover, Xerxes bans the cult of the *daivā* by laying his ‘*kiten* upon them, lest the *šip* of the *daivā* be performed!’ This magical use of *kiten* (*kitin*), divine power in the hands of the monarch, strikes one as a direct echo of Elamite usage: Hanni, for one, laid *kitin* of the gods upon his relief as a ban protecting it from violation (Henkelman 2008: 364–371; 2017a: 318f. n.75; compare Garrison s.d. §4.3.5. and Rollinger 2011: 20–22).

The central message of the *Daivā* inscription may be Iranian, but it nevertheless includes an important Elamite sacrificial term and a crucial Elamite religious concept, both connected with Elamite royal ideology. These are present not because the scribe wanted to appeal to the tastes of an Elamite audience but because they were internalized in Persian society.

Note

¹ All abbreviations as per Henkelman 2008.

Bibliography

- Álvarez-Mon, J. 2005. Elamite Funerary Clay Heads. *Near Eastern Archaeology* 68: 114–122.
- . 2011. The golden griffin from Arjan. In: Álvarez-Mon and Garrison (eds.): 299–373.
- . 2013. Aesthetics of the natural environment in the arts of the ancient Near East: the Elamite rock-cut sanctuary of Kurangun. In: Brown, B.A. and Feldman, M.H. (eds.) *Critical approaches to ancient Near Eastern art*. Berlin: De Gruyter, 741–771.
- Álvarez-Mon, J. and Basello, G.P. 2014. Like a Thunderstorm: Storm-Gods ‘Sibitti’ Warriors from Highland Elam. *Annali dell’Istituto Universitario Orientale di Napoli* 74: 17–46.
- Álvarez-Mon, J. and Garrison, M.B. (eds.) 2011. *Elam and Persia*. Winona Lake: Eisenbrauns.
- Amiet, P. 1994. Quelques sceaux élamites. In: Gasche, H. et al. (eds.) *Cinquante-deux réflexions sur le Proche-Orient ancien offertes en hommage à Léon De Meyer*. Mesopotamian History and Environment – Occasional Publications 2. Gent: Peeters, 59–66.
- Andreas, F.C. 1904. Über einige Fragen der ältesten persischen Geschichte. In: *Verhandlungen des 13. internationalen Orientalisten-Kongresses*, Leiden: Brill, 93–99.
- Basello, G.P. 2011. Elamite as administrative language: from Susa to Persepolis. In: Álvarez-Mon and Garrison (eds.): 61–88.
- . 2012a. Doorknobs, nails or pegs? The function(s) of the Elamite and Achaemenid inscribed knobs. In: Basello, G.P. and Rossi, A.V. (eds.) *Dariosh Studies*, vol. 2: *Persepolis and its settlements: territorial system and ideology in the Achaemenid state*, Napoli: Università degli Studi di Napoli “L’Orientale,” 1–66, Pls. 1–20.
- . 2012b. L’uomo e il divino nell’antico Elam. In: Basello, G.P., Ognibene, P. and Panaino, A. (eds.) *Il mistero che rivelato ci divide e sofferto ci unisce: studi pettazzoniani in onore di Mario Gandini*, San Giovanni in Persiceto: Biblioteca Comunale “Giulio Cesare Croce,” 143–220.
- . 2017. Of gods and men in the Persepolis Bronze Plaque. In: Henkelman and Redard (eds.): 347–383.
- . s.d. 1. Administrative topography in comparison: overlapping jurisdictions between the Susa Acropole Tablets and the Persepolis Fortification Tablets. In: Tavernier, J. et al. (eds.) *Topography and Toponymy in the Ancient Near East: Perspectives and Prospects*. Publications de l’Institut Orientaliste de Louvain 71. Leuven: Peeters.
- . s.d. 2. The sign GAM in Elamite and the Old Persian word-divider. In: Schmitt, R. et al. (eds.) *Achaimenidica* 1. Wien: Österreichische Akademie der Wissenschaften.
- Borger, R. 1996. *Beiträge zum Inschriftenwerk Assurbanipals: die Prismenklassen A, B, C = K, D, E, F, G, H, J und T sowie andere Inschriften*. Wiesbaden: Harrassowitz.
- Boyce, M. 1982. *A history of Zoroastrianism*, vol. 2: *Under the Achaemenians*. Handbuch der Orientalistik 1.8.1.2.2A/2. Leiden: Brill.
- Briant, P. 2002. *From Cyrus to Alexander: a history of the Persian Empire*. Winona Lake: Eisenbrauns.
- Brown, S.C. 1986. Media and Secondary State Formation in the Neo-Assyrian Zagros: An Anthropological Approach to an Assyriological Problem. *Journal of Cuneiform Studies* 38: 107–119.
- Canepa, M.P. 2013. The transformation of sacred space, topography, and royal ritual in Persia and the ancient Iranian world. In: Ragavan, D. (ed.) *Heaven on Earth: temples, ritual, and cosmic symbolism in the ancient world*. Oriental Institute Seminars 9. Chicago: Oriental Institute, 319–372.
- Carter, E. 1994. Bridging the gap between the Elamites and the Persians in southeastern Khuzistan. In: Sancisi-Weerdenburg,

- H.W.A.M., Kuhrt, A. and Root, M.C. (eds.) *Continuity and Change*. Achaemenid History 8. Leiden: Nederlands Instituut voor het Nabije Oosten: 65–95.
- . 2011. Landscapes of death in Susiana during the last half of the 2nd millennium B.C. In: Kozuh et al. (eds.): 45–58.
- Carter, E. and Wright, H. 2003. Archaeological survey on the western Ram Hormuz Plain, 1969. In: Miller, N.F. and Abdi, K. (eds.) *Yeki bud, yeki nabud: Essays on the archaeology of Iran in honor of William M. Sumner*. Los Angeles: Cotsen Institute of Archaeology, 60–82.
- De Graef, K. 2009. Count Your Sheep! Doings and Dealings of Kûya, Trader in Small Stock During the Early Sukkalmahat. *Revue d'Assyriologie* 103: 5–18.
- de Miroschedji, P. 1985. La fin du royaume d'Anšan et de Suse et la naissance de l'Empire perse. *Zeitschrift für Assyriologie* 75: 265–306.
- . 1990. La fin de l'Élam: essai d'analyse et d'interprétation. *Iranica Antiqua* 25: 47–95.
- De Vaan, J.M.C.T. 1998. Idiom im Neubabylonischen (I): Erläuterungen zum Vokabular des Generals Bēl-ibni. In: Dietrich, M. and Loretz, O. (eds.) *dubsar anta-men, Studien zur Altorientalistik: Festschrift für Willem H.Ph. Römer*. Alter Orient und Altes Testament 253. Münster: Ugarit-Verlag, 71–80.
- D'Erme, G.D. 1990. Elamico e antico-persiano; affinità stilistiche tra i due sistemi scrittori. In: Gnoli, G. and Panaino, A.C.D. (eds.) *Proceedings of the First European Conference of Iranian Studies*, vol. 1. Serie Orientale Roma 67.1. Roma: Istituto Italiano per il Medio ed Estremo Oriente, 69–83.
- Fisher, M.T. and Stolper, M.W. 2015. Achaemenid Elamite administrative tablets, 3: fragments from Old Kandahar, Afghanistan. *ARTA* 2015.001.
- Fuchs, A. and Parpola, S. 2001. *The Correspondence of Sargon II*, vol. 3: *Letters from Babylonia and the Eastern Provinces*. State Archives of Assyria 15. Helsinki: Helsinki University.
- Garrison, M.B. 1996. A Persepolis Fortification Seal on the Tablet MDP 11 308 (Louvre Sb 13078). *Journal of Near Eastern Studies* 55: 15–35.
- . 2002 [2006]. The 'Late Neo-Elamite' Glyptic Style: A Perspective from Fars. *Bulletin of the Asia Institute* 16: 65–102.
- . 2011. The seal of "Kuraš the Anzanite, son of Šešpeš" (Teispes), PFS 93*: Susa – Anšan – Persepolis. In: Álvarez-Mon and Garrison (eds.): 375–405.
- . 2014. The royal-name seals of Darius I. In: Kozuh et al. (eds.): 67–104.
- . 2017. Beyond Auramazdā and the winged symbol: imagery of the Divine and Numinous at Persepolis. In: Henkelman and Redard (eds.): 185–246.
- . s.d. Visual representation of deities and demons in Achaemenid Iran: old problems, new directions. In: Uehlinger, C. and Graf, F. (eds.) *Iconography of ancient Near Eastern religions*, vol. 1: *pre-Hellenistic periods, introductory essays*, Leiden.
- Gaspa, S. 2017. State theology and royal ideology of the Neo-Assyrian Empire as a structuring model for the Achaemenid imperial religion. In: Henkelman and Redard (eds.): 125–184.
- Gershevitch, I. 1979. The Alloglottography of Old Persian. *Transactions of the Philological Society* 1979: 114–190.
- Gibson, M. 1991. Duplicate Systems of Trade: A Key Element in Mesopotamian history. In: Haellquist, K.R. (ed.) *Asian Trade Routes*. Studies on Asian Topics 13. London: Curzon, 27–37, 254–256, 281.

- Grayson, A.K. and Novotny, J. 2012. *The Royal Inscriptions of Sennacherib, King of Assyria (704–681 BC)*, Part 1. Royal Inscriptions of the Neo-Assyrian Period 3.1. Winona Lake: Eisenbrauns.
- Grillot, F. 1983. Le ‘suhter’ royal de Suse. *Iranica Antiqua* 18: 1–23.
- Henkelman, W.F.M. 2003a. Persians, Medes and Elamites: Acculturation in the Neo-Elamite period. In: Lanfranchi, Roaf and Rollinger (eds.): 181–231.
- . 2003b. An Elamite memorial: the *šumar* of Cambyses and Hystaspes. In: Henkelman, W.F.M. and Kuhrt, A. (eds.) *A Persian perspective: essays in memory of Heleen Sancisi-Weerdenburg*. Achaemenid History 13. Leiden: Nederlands Instituut voor het Nabije Oosten, 101–172.
- . 2005. Animal sacrifice and ‘external’ exchange in the Persepolis Fortification Tablets. In: Baker, H.D. and Jursa, M. (eds.) *Approaching the Babylonian economy*. Studies in the Economic History of First Millennium Babylonia 2 = Alter Orient und Altes Testament 330. Münster: Ugarit-Verlag, 137–165.
- . 2008. *The Other Gods Who Are: Studies in Elamite-Iranian acculturation based on the Persepolis Fortification texts*. Achaemenid History 14. Leiden: Nederlands Instituut voor het Nabije Oosten.
- . 2010. “Consumed before the King” – The table of Darius, that of Irdabama and Irtaštuna, and that of his satrap, Karkiš. In: Jacobs, B. and Rollinger, R. (eds.) *Der Achämenidenhof*. Classica et Orientalia 2. Wiesbaden: Harrassowitz, 667–775.
- . 2011a. Cyrus the Persian and Darius the Elamite: a case of mistaken identity. In: Rollinger, R., Truschnegg, B. and Bichler, R. (eds.) *Herodot und das Persische Weltreich; Herodotus and the Persian Empire*. Classica et Orientalia 3. Wiesbaden: Harrassowitz, 577–634.
- . 2011b. Of Tapyroi and Tablets, States and Tribes: The Historical Geography of Pastoralism in the Achaemenid Heartland in Greek and Elamite Sources. *Bulletin of the Institute of Classical Studies* 54/2: 1–16.
- . 2011c. Parnakka’s Feast: *šip* in Pārsa and Elam. In: Álvarez-Mon and Garrison (eds.): 89–166.
- . 2014. Teispès et les Perses. *Annuaire de l’École Pratique des Hautes Études, Section des sciences historiques et philologiques* 145: 19–21.
- . 2017a. Humban and Auramazdā: royal gods in a Persian landscape. In: Henkelman, W.F.M. and Redard, C. (eds.) *Persian Religion in the Achaemenid Period/La religion perse à l’époque achéménide*. Classica et Orientalia 16. Wiesbaden: Harrassowitz, 273–346.
- . 2017b. Imperial Signature and Imperial Paradigm: Achaemenid administrative structure and system across and beyond the Iranian plateau. In: Jacobs, B., Henkelman, W.F.M. and Stolper, M.W. (eds.) *Die Verwaltung im Achämenidenreich – Imperiale Muster und Strukturen/Administration in the Achaemenid Empire – Tracing the Imperial Signature*. Classica et Orientalia 17. Wiesbaden: Harrassowitz, 45–256.
- . s.d. 1. Local Administration: Persia. In: Jacobs and Rollinger (eds.).
- . s.d. 2. The heartland pantheon. In: Jacobs and Rollinger (eds.).
- . s.d. 3. Practice of worship in the Achaemenid heartland. In: Jacobs and Rollinger (eds.).
- . s.d. 4. Bactrians in Persepolis – Persians in Bactria. In: Lhuillier, J. and Boroffka, N. (eds.) *A millennium of history: the Iron Age in southern Central Asia (2nd and 1st millennia BC)*. Archäologie in Iran und Turan.
- . s.d. 5. Of nanny goats and fated horses: reflections on Elamite *muhtu* and *kulla-*. In: Henkelman, W.F.M. (ed.) *Studies*

- in Achaemenid Culture and Society on the Basis of the Persepolis Fortification Archive.
- . s.d. 6. The other gods still are: an update from Persepolis. In: Henkelman, W.F.M., *Studies in Achaemenid Culture and Society on the Basis of the Persepolis Fortification Archive*.
- Henkelman, W.F.M. and Khaksar, S. 2014. Elam's dormant sound: landscape, music, and the Divine in ancient Iran. In: Eneix, L.C. (ed.) *Archaeoacoustics: the Archaeology of Sound*. Myakka City: OTS Foundation, 211–231.
- Henkelman, W.F.M. and Kleber, K. 2007. Babylonian workers in the Persian heartland: palace building at Matannan during the reign of Cambyses. In: Tuplin, C. (ed.) *Persian Responses: Political and Cultural Interaction With(in) the Achaemenid Empire*. Swansea: Classical Press of Wales, 163–176.
- Henkelman, W.F.M. and Miri, N. s.d. Ancient Neirīz: reflections on an Achaemenid and Sasanian city.
- Henkelman, W.F.M. and Stolper, M.W. 2009. Ethnic identity and ethnic labelling at Persepolis: the case of the Skudrians. In: Briant, P. and Chauveau, M. (eds.) *Organisation des pouvoirs et contacts culturels dans les pays de l'empire achéménide*. Persika 14. Paris: De Boccard, 271–329.
- Hinz, W. 1970. Die elamischen Buchungstäfelchen der Darius-Zeit. *Orientalia* 39: 421–440.
- . 1971. Achämenidische Hofverwaltung. *Zeitschrift für Assyriologie* 61: 260–311.
- . 1973. *Neue Wege im Altpersischen*. Göttinger Orientforschungen 3.1. Wiesbaden: Harrassowitz.
- . 1976/1979. *Darius und die Perser: eine Kulturgeschichte der Achämeniden*., 2 vols. Baden-Baden: Holle.
- . 1987. Elams Übergang ins Perserreich. In: Gignoux, P. (ed.) *Transition periods in Iranian history*. Studia Iranica Cahier 5. Paris: Association pour l'Avancement des Études Iraniennes, 125–134.
- Hinz, W. and Koch, H. 1987. *Elamisches Wörterbuch*, 2 vols., Archäologische Mitteilungen aus Iran Erg.Bd. 17. Berlin: Dietrich Reimer.
- Jacobs, B. and Rollinger, R. (eds.). s.d. *A companion to the Achaemenid Persian empire*. Chichester: Wiley Blackwell.
- Joannès, F. 1990. Textes babyloniens de Suse d'époque achéménide. In: Vallat, F. (ed.) *Contribution à l'histoire de l'Iran: mélanges offerts à Jean Perrot*. Paris: Recherche sur les Civilisations, 173–180.
- Kellens, J. 2002. L'idéologie religieuse des inscriptions achéménides. *Journal Asiatique* 290.2: 417–464.
- . 2012. Les Achéménides et l'Avesta. In: Cantera, A. (ed.) *Séptimo centenario de los estudios Orientales en Salamanca*. Estudios Filológicos 337. Salamanca: Universidad de Salamanca, 551–558.
- Koch, H. 1977. *Die religiösen Verhältnisse der Dareioszeit: Untersuchungen an Hand der elamischen Persepolistäfelchen*. Göttinger Orientforschungen 3.4. Wiesbaden: Harrassowitz.
- . 1980. Steuern in der achämenidischen Persis? *Zeitschrift für Assyriologie* 70: 105–137.
- . 1987. Götter und ihre Verehrung im achämenidischen Persien. *Zeitschrift für Assyriologie* 77: 239–278.
- . 1995. Theology and worship in Elam and Achaemenid Iran. In: Sasson, J. (ed.) *Civilizations of the ancient Near East*, vol. 3. New York: Charles Scribner's Sons, 1959–1969.
- . 2011. Iran. In: Haas, V. and Koch, H., *Religionen des Alten Orients*, vol. 1: *Hethiter und Iran*. Grundrisse zum Alten Testament 1.1. Göttingen: Vandenhoeck & Ruprecht, 17–144.
- Kozuh, M.B., Henkelman, W.F.M., Jones, C.E. and Woods, C. (eds.) 2011. *Extraction and control: studies in honor of Matthew W. Stolper*. Studies in Ancient Oriental Civilization 68. Chicago: Oriental Institute.
- Kreyenbroek, P.G. 2012. On the Construction of Zoroastrianism in Western Iran. *Bulletin of the Asia Institute* 22: 47–56.

- Lanfranchi, R.B., Roaf, M. and Rollinger, R. (eds.) 2003. *Continuity of Empire (?): Assyria, Media, Persia*. History of the Ancient Near East – Monographs 5. Padova: S.A.R.G.O.N.
- Lipiński, E. 2005. s.v. Adad. In: L. Jones (ed.) *Encyclopedia of Religion* (second edition), vol. 1. Detroit etc.: Thompson Gale, 27–29.
- McCall, B. 2013. Re-assessing Elamite highland boundaries: new evidence for the Middle and Neo-Elamite periods in the Mamasani valleys, south-western Iran. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam: archaeological, philological, historical and geographical perspectives*. Mémoires de la Délégation en Perse 58. Leiden: Brill, 191–205.
- Moghaddam, A. and Miri, N. 2003. Archaeological Research in the Mianab Plain of lowland Susiana, South-Western Iran. *Iran* 41: 99–137.
- . 2007. Archaeological Surveys in the “Eastern Corridor,” South-Western Iran. *Iran* 45: 23–55.
- Potts, D.T. 2004. The numinous and the immanent: some thoughts on Kurangun and the Rudkhaneh-e Fahliyan. In: Von Folsach, K., Thrane, H. and Thuesen, I. (eds.) *From Handaxe to Khan: Essays Presented to Peder Mortensen on the Occasion of His 70th Birthday*. Aarhus: Aarhus University, 143–156.
- . 2005. Cyrus the Great and the Kingdom of Anshan. In: Sarkhosh Curtis, V. and Stewart, S. (eds.) *Birth of the Persian Empire*, vol. 1, London: I.B. Tauris, 7–28.
- . 2010. Elamite Temple Building. In: Boda, M.J. and Novotny, J. (eds.) *From the Foundations to the Crenellations: Essays on Temple Building in the Ancient Near East and Hebrew Bible*. Alter Orient und Altes Testament 366. Münster: Ugarit-Verlag, 49–70, 479–509.
- . 2011. A note on the limits of Anšan. In Álvarez-Mon and Garrison (eds.): 35–43.
- . 2016. *The archaeology of Elam: formation and transformation of an Ancient Iranian state*. Cambridge: CUP [second, revised edition].
- Potts, D.T. et al. (eds.) 2009/1388. *The Mamasani Archaeological Project, stage one: a report on the first two seasons of the ICAR – University of Sydney expedition to the Mamasani District, Fars Province, Iran*. Oxford: Archaeopress.
- Radner, K. 1997. *Die neuassyrischen Privatrechtsurkunden als Quelle für Mensch und Umwelt*. State Archives of Assyria Studies 6. Helsinki: The Neo-Assyrian Text Corpus Project.
- . 2003. An Assyrian view of the Medes. In: Lanfranchi, Roaf and Rollinger (eds.): 37–64.
- Rapin, C. 2017. Sanctuaires sogdiens et cultes avestiques de l’époque de Gava à l’époque hellénistique (Koktepe et Sangir-tepe). In: Henkelman and Redard (eds.): 417–460.
- Razmjou, S. 2004. The *lan* Ceremony and Other Ritual Ceremonies in the Achaemenid Period: The Persepolis Fortification Tablets. *Iran* 42: 103–117.
- Reiner, E. 1969. The Elamite Language. In: Friedrich, J. et al., *Altkleinasiatische Sprachen*. Handbuch der Orientalistik 1.2.1–2.2. Leiden: Brill, 54–118.
- . 1973. Inscription from a Royal Elamite Tomb. *Archiv für Orientforschung* 24: 87–102.
- Rollinger, R. 1999. Zur Lokalisation von Parsu(m)a(š) in der Färs und zu einigen Fragen der frühen persischen Geschichte. *Zeitschrift für Assyriologie* 89: 115–139.
- . 2011. Herrscherkult und Königsvergöttlichung bei Teispiden und Achaimeniden: Realität oder Fiktion? In: Günther, L.-M. and Plischke, S. (eds.) *Studien zum vorhellenistischen und hellenistischen Herrscherkult*. Oikumene 9. Berlin: Antike,

- Rossi, A.V. 2005. La scrittura antico-persiana e la scrittura elamico-achemenide. In: Bernardini, M. and Tornesello, N.L. (eds.) *Scritti in onore di Giovanni M. D'Erme*, vol. 2. Napoli: Università degli Studi di Napoli "L'Orientale," 927–942.
- Sancisi-Weerdenburg, H. 1988. Was there ever a Median Empire? In: Kuhrt, A. and Sancisi-Weerdenburg, H. (eds.) *Method and Theory. Achaemenid History 3*. Leiden: Nederlands Instituut voor het Nabije Oosten, 197–212.
- Schaudig, H. 2001. *Die Inschriften Nabonids von Babylon und Kyros' des Großen, samt den in ihrem Umfeld entstandenen Tendenzschriften*. Alter Orient und Altes Testament 256. Münster: Ugarit-Verlag.
- Scheil, V. o.p. 1907. *Textes élamites-anzanites, troisième série*. Mémoires de la Délégation en Perse 9. Paris: Ernest Leroux.
- Schmitt, R. 2009. *Iranische Personennamen in der neuassyrischen Nebenüberlieferung*. Iranisches Personennamenbuch 7.1a = Sitzungsberichte der Österreichischen Akademie der Wissenschaften phil.-hist. Klasse 792. Wien: Österreichische Akademie der Wissenschaften.
- Seidl, U. 1986. *Die elamischen Felsreliefs von Kūrāngūn und Naqš-e Rostam*. Iranische Denkmäler 2.H.12. Berlin: Dietrich Reimer.
- Stolper, M.W. 1978. šarnuppu. *Zeitschrift für Assyriologie* 68: 261–269.
- . 1985. *Entrepreneurs and Empire: the Murašû archive, the Murašû firm, and Persian rule in Babylonia*. Publications de l'Institut Historique et Archéologique Néerlandais de Stamboul 54. Leiden: Nederlands Instituut voor het Nabije Oosten.
- . 2005. Achaemenid languages and inscriptions. In: Curtis, J. and Tallis, N. (eds.) *Forgotten Empire: the world of Ancient Persia*, London: British Museum, 18–24.
- . s.d. Mesopotamianisms in the Achaemenid Elamite adaptation of cuneiform. *Signs of Writing: the Cultural, Social and Linguistic Contexts of the World's First Writing Systems*, III.
- Stronach, D. 1990. On the genesis of the Old Persian cuneiform script. In: F. Vallat (ed.) *Contribution à l'histoire de l'Iran: Mélanges offerts à Jean Perrot*. Paris: Éditions Recherche sur les Civilisations, 195–203.
- . 2013. Cyrus and the Kingship of Anshan: Further Perspectives. *Iran* 51: 55–69.
- Tavernier, J. 2003. Drei altiranische Notizen. In: Van Tongerloo, A. (ed.) *Iranica Selecta: Studies in honour of professor Wojciech Skalmowski on the occasion of his seventieth birthday*. Silk Road Studies 8. Turnhout: Brepols, 247–256.
- . 2004. Some thoughts on Neo-Elamite chronology. *ARTA* 2004.003.
- . 2006. Elam: Neo-Elamite period (ca. 1000–530 B.C.). In: Eder, W. and Renger, J. (eds.) *Chronologies of the ancient world: names, dates and dynasties*. Brill's New Pauly, Suppl. 1. Leiden: Brill, 22–4.
- . 2007a. *Iranica in the Achaemenid period (ca. 550–330 B.C.): Lexicon of Old Iranian proper names and loanwords attested in non-Iranian texts*. Orientalia Lovaniensia Analecta 158. Leuven: Peeters.
- . 2007b. The Case of Elamite *tep-/tip-* and Akkadian *tuppu*. *Iran* 45: 57–69.
- . 2007c. On Some Elamite Signs and Sounds. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 157: 265–292.
- . 2011. Iranians in Neo-Elamite texts. In: Álvarez-Mon and Garrison (eds.): 191–261.
- Tuplin, C. 2013. *The Arshama Letters from the Bodleian Library*, vol. 3: *Commentary* [arshama.bodleian.ox.ac.uk/publications/; accessed 11/01/2017].
- Vallat, F. 1995. Une inscription élamite écrite de droite à gauche! *NABU* 1995/45.
- . 2000. Le 'clergé' élamite. In: Graziani, S. (ed.) *Studi sul Vicino Oriente antico dedicati alla memoria di Luigi Cagni*, vol.

2. Istituto Universitario Orientale, Dipartimento di Studi Asiatici, Series Minor 61. Napoli: Istituto Universitario Orientale, 1065–1074.
- . 2001. Les *puhlalê* d'Assurbanipal. *NABU* 2001/65.
- . 2002/03. s.v. Suse: G.1. La religion suso-élamite. *Supplément au Dictionnaire de la Bible* fasc. 74: 529–553.
- . 2011. Darius, l'héritier légitime, et les premiers Achéménides. In: Álvarez-Mon and Garrison (eds.): 263–284.
- Waerzeggers, C. 2014. A statue of Darius in the temple of Sippar. In: Kozuh et al. (eds.): 323–329.
- Waters, M.W. 1999. The Earliest Persians in Southwestern Iran: The Textual Evidence. *Iranian Studies* 32/1: 99–107.
- . 2000. *A survey of Neo-Elamite history*. State Archives of Assyria Studies 12. Helsinki: Neo-Assyrian Text Corpus Project.
- . 2004. Cyrus and the Achaemenids. *Iran* 42: 91–102.
- . 2011. Parsumaš, Anšan, and Cyrus. In: Álvarez-Mon and Garrison (eds.): 285–296.
- . 2013. Elam, Assyria, and Babylonia in the early first millennium BC. In: D.T. Potts (ed.) *The Oxford handbook of Ancient Iran*. Oxford: OUP, 478–492.
- Wenskus, S.R. 1961. *Stammesbildung und Verfassung: das Werden der frühmittelalterlichen gentes*. Köln: Böhlau.
- Wicks, Y. 2015. *Bronze 'bathtub' coffins in the context of 8th-6th century BC Babylonian, Assyrian and Elamite funerary practices*. Oxford: Archaeopress.
- Yakubovich, I. 2008. review Sanders, S.L. (ed.) *Margins of Writing, Origins of Cultures* (Chicago 2006). *Journal of Indo-European Studies* 36: 202–211.
- Zadok, R. 1976. On the Connections Between Iran and Babylonia in the Sixth Century B.C. *Iran* 14: 61–78.
- . 2011. The Babylonia – Elam Connections in the Chaldaean and Achaemenid Periods. *Tel Aviv* 38: 120–143, 241–271.
- Zournatzi, A. s.d. Early cross-cultural political encounters along the paths of the Silk Road: Cyrus the Great as a “King of the City of Anshan.” In: Akbarzadeh, D. (ed.) *Proceedings of the First International Conference “Iran and the Silk Road.”* Tehran.

CHAPTER FOURTY

The Elamite artistic heritage of Persia



Javier Álvarez-Mon

Introduction

The study and interpretation of Persian art has traditionally been dominated by two academic approaches. The first, and earliest, emphasized Greek influence and developed into an entire school of thought giving license to the elaboration of often farfetched theories regarding the presence of Greek-inspired elements of style and direct Greek authorship in Persian arts. The second viewed Persian art as eclectic in nature and during the 1970s developed a voice, independent from classicist biases, that sought to understand it within a Near Eastern context. Common to both of these approaches was that Elam was seldom, if ever, part of the analytical equation. Yet by the mid-6th century BC, just before the emergence of the Persian Empire and following a period of Iranian and Elamite acculturation, the inhabitants of southwestern Iran were embedded in landscapes bearing a legacy of Elamite monumental architectural and sculptural arts. As a counterbalance to previous interpretations, the present synthesis seeks to place Persian arts within the context of this Elamite heritage.

Monumental Architecture: Mud-brick Heritage

The so-called *apadana* or hypostyle hall is considered the main signature of Persian architecture, and its origin continues to attract considerable academic attention (Gopnik 2005: 199). In the conceptualization and construction of this iconic building, two distinct, though complementary, architectural traditions converged: one a local Elamite tradition conversant with the use of mud-brick and the other, well attested in the Zagros highlands, with the use of wooden and stone columns.

Appreciation of the crucial role that mud-brick played in the building of the Persian *apadana* and related monumental architecture was initially impeded by an emphasis on the solid, visible parts of the archaeological record. Earlier archaeologists at Persepolis, in fact, struggled to determine whether the Persian *apadana* had any walls at all, with some

reconstructions showing the palace as a forest of columns. It was only through the later excavations by Erich F. Schmidt (1934–1939) and careful studies and reconstructions by Friedrich Krefter (1971) that the fundamental role and characteristics of the massive mud-brick walls enclosing the columned halls and the mud-brick fortifications of Persepolis were brought to light. Parallels with Elamite mud-brick architecture are, however, still best attested at Susa; with further references of outstanding mastery of mud-brick construction and associated wood-columned halls found in the “Median” heartland at Tepe Nush-e Jan (Stronach and Roaf 2007).

While we still lack knowledge of most aspects of Elamite palace layouts, excavations in the Ville Royale at Susa (Chantier A, levels XV–XII, ca. 1900–1500 BC) have furnished examples of Old Elamite period monumental buildings in the form of large villa-compounds. The layout of these villas was determined by a planning principle that adopts as its central feature an open courtyard associated with a long, rectangular, “reception” hall. Near each end of the “reception” hall were positioned two pairs of pilasters. The exact function of these pilasters has been debated, but in all probability they held arches supporting a vaulted ceiling. Judging by the hall’s thick mud-brick walls, a second floor may also have been present.

With the exception of the *apadana*, the Persian palace built by Darius at Susa follows this traditional Elamite architectural layout. It is a mud-brick-built monumental complex organized around three main courtyards, and its ceremonial and private living quarters, ordered axially along the “western” courtyard (C1 or *court d’honneur*), have retained palpable evidence of the “pilaster-hall plus courtyard” principle. The two consecutive massive pilaster-halls (rooms 752 and 753) linking the courtyard to the “Throne Hall” (or royal chamber) are particularly noteworthy. Another two consecutive pilaster-halls (rooms 358 and 357) connect the central courtyard with the *apadana* and in the southern wing a sequence of five (?) living quarter compounds also incorporate pilaster-halls and open courtyards (e.g. room 1414) (Ladiray 2010: 208–221; Perrot 2010: 226).

A similar planning principle, albeit on a smaller scale, is attested at Persepolis in the living quarters thought to have housed the palace guards and artisans. This partially excavated mud-brick compound (E Complex) incorporating a “pilaster-hall plus courtyard” is situated to the east of the Treasury between a 6 m wide avenue and the defensive mud-brick city wall (room 9; Schmidt 1953: 201, Figure 84). Finally, to the north-east (east of the “unfinished gate”) are two consecutive perpendicular monumental pilaster-halls that may have opened into courtyards.

Since no traces of this “pilaster-hall plus courtyard” principle have yet been found in Middle or Neo-Elamite architecture, numerous scholars have embraced the notion that Darius’ architects borrowed this monumental building format from the late Neo-Babylonian palaces of Nebuchadnezzar II (604–562 BC; the *Südburg*, courts D and E; the *Hauptburg*, and *Sommerpalast*). Recent reassessment of the archaeological evidence, however, suggests that

the wings incorporating these halls were later additions made to the Babylonian palaces by the Persian kings (Gasche 2010).

Recalling another Elamite architectural tradition are the royal inscriptions on an undetermined number of mud-bricks, glazed bricks and tiles at Darius' palace at Susa. These inscriptions are formulaic in nature: most include Darius' "signature" (name, titles and father's name); some are more elaborated and state his piety and the special support of Ahura Mazda (DSI); a few contain a remarkable statement which could refer to the aesthetic properties of the palace "*may it seem splendid to everyone* (who sees it)" (DSa). The original placement of these inscriptions is unknown, but the fact that some were made on glazed bricks and tiles suggests they were probably exposed on visible sections of the palace walls (Lecoq 1997).

Glazed and unglazed mud-bricks inscribed with royal building dedications to divinities are well attested in Elam (Malbran-Labat 1995; Potts 2010; Canepa 2015: 15). In the holy city of Chogha Zanbil, 662 hand-inscribed mud-bricks bearing the same inscription of Untaş Napiriša (1340–1330 BC) were exhibited along the lower facade of the ziggurat. At Susa, a unique inscribed brick of Šutruk Nahhunte (1190–1150 BC) refers to the construction of the *hiyan/iyan*, a monumental building dedicated to Inšušinak incorporating a columned hall or portico (Vallat 1999). Judging by this evidence, the inscribed mud-bricks from Darius' palace appear to be an adoption of an Elamite "writing on the wall" tradition advertising the piety of the king, whose agency as *roi bâtisseur* materialized in a wondrous monumental building.

Sculpture

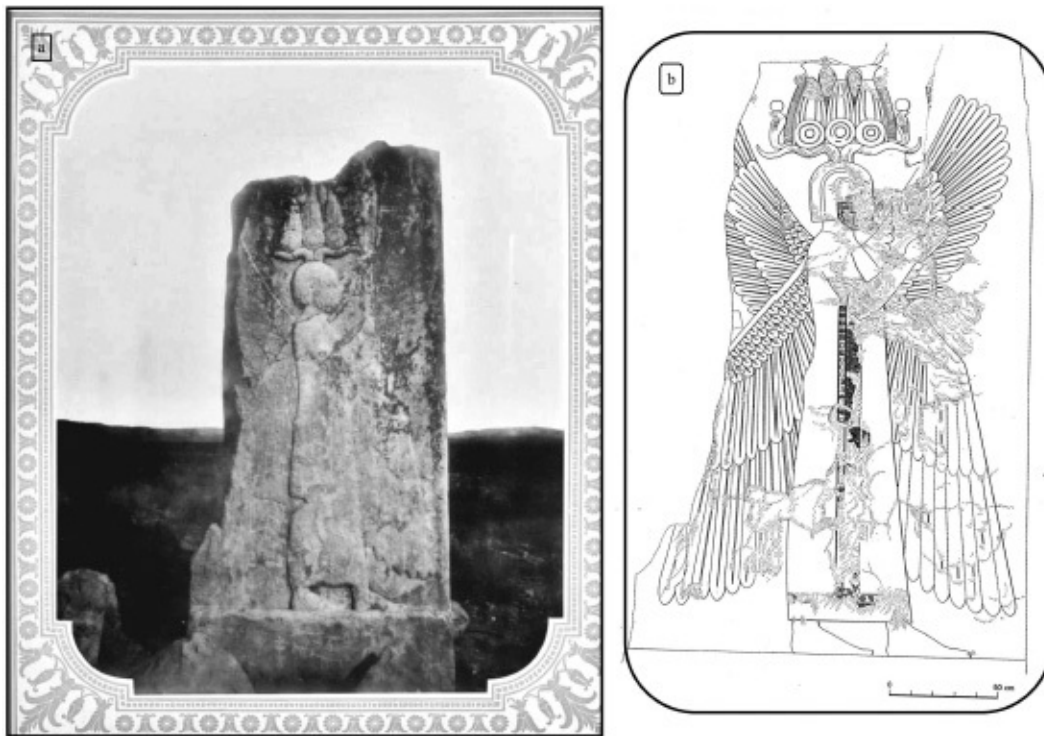
The following examination of Persian sculpture concentrates on the winged guardian from Pasargadae, the façade of the Tomb of Darius I at Naqsh-e Rostam and the Persepolis *apadana* staircase reliefs. The latter two monuments are seen by most specialists as having provided the prototypes for the canonized form of official Persian sculpture. The Bisotun relief is another primary source of information for the "archaizing" tendencies of Persian sculptural arts, but it stands apart iconographically and ideologically, and on both counts seems to have had little impact on the formation and development of the official artistic program. This section concludes with a discussion of the complex manufacturing processes (*chaîne opératoire*) of Persian low-relief sculpture and glazed-brick panels, both of which reveal distinct continuities with Elam.

Cyrus and the winged guardian from Pasargadae

The so-called winged genius from Pasargadae (Elamite *Batrakataš*) today remains the single most important surviving relief carved during the time of Cyrus the Great (558–529 BC).

Justifiably, this enigmatic 2.10 m tall guardian figure has been widely – and variously – drawn, described, discussed and interpreted [see [Figs. 40.1a, 40.1b](#)]. The foundational archaeological analysis and description of this relief was published by David Stronach in his volume *Pasargadae* (1978). According to Stronach's interpretation, the two doorways to the hypostyle building known as the Portal or Gate R had originally housed four comparable images of the winged guardian facing towards the interior of the building.

The peculiar composite headdress worn by this figure combines two distinct parts: an Egyptian-style triple 'atef' crown mounted on a pair of ram horns and flanked by two uraei, and a close-fitting ribbed helmet which supports the ensemble from below. The upper section finds numerous parallels in Syro-Phoenician ivory and metal workmanship, but some of the closest correspondences are found in Assyrian contexts. Most comparable are the four-winged genies with Egyptian-style crown depicted in stamped decoration on jars produced at Nimrud (Herrmann and Curtis 1998: 117–119). This imagery may therefore have been adopted by Elamite and emerging Persian elites via Assyrian mediation (Álvarez-Mon 2010a: 278).



[Figure 40.1 \[a\] First known photograph of the winged protective genius from Gate R at Pasargadae taken by F. Stolze in 1874 \(after Andreas and Nöldeke 1882, Figure 132\); \[b\] Line-drawing \(Courtesy of David Stronach 1978\).](#)

A full-length robe with fringed hem and short sleeves completes the guardian's costume. The only visible remains of ornamentation are a single row of rosettes with eight petals and eight small sepals along the vertical and horizontal garment borders. Marcel Dieulafoy (1893: 53) and many other scholars since have commented on the close parallels between this costume and that worn by Elamite king Te'umman in the Assyrian reliefs from Nineveh

depicting the Ulai river battle of ca. 653 BC [see [Figure 40.2a](#)]. The adoption of the fringed robe here at Pasargadae in ca. 546–530 BC is a clear allusion to an Elamite past [see [Figs. 40.1c, 40.1d](#)] (Álvarez-Mon 2009). Separated by about a century, these representations of the Elamite robe must have been somehow linked by networks of artistic transmission. Presently we can posit that “native Elamite” influences were channeled through the various garments depicted on the king Atta-Hamiti-Inšušinak (ca. 650–520 BC) on his stele from Susa, by Hanni in the relief of Kul-e Farah I (650–575 BC), or by the various rulers and members of the elite depicted in other reliefs from Kul-e Farah [see, for example, [Figs. 40.8 and 40.9](#)]. At the same time, we should consider the possibility of the existence of an elite “Teispid” garment alluding to the Anshanite royal lineage of Cyrus.

The tomb of Darius I at Naqsh-e Rostam

By the time king Darius chose the imposing rock cliff of Naqsh-e Rostam for his burial, this site had been home to an Elamite open-air sanctuary for no less than a millennium. By choosing this precipitous rock face ca. 6 km northwest of Persepolis, Darius seems to have instigated a new convention that directly acknowledged the significance of this Elamite sanctuary, which incorporated earlier relief carvings of Elamite royalty and deities, and implied a recognition of “native” cults. At the same time, his funerary chamber is in stark contrast with traditional Elamite subterranean vaults. Dated ca. 518 BC, the tomb is a rock-cut crypt carved into the vertical face of the cliff [see [Figure 40.3](#)]. Inside are a vestibule and three small chambers with (partial) gabled ceilings. Cut into the floor of each chamber are three rectangular cists with gabled lids, which Schmidt (1970: 88) believed had originally received coffins made of metal or wood covered with metal sheet. Since any coffins had to be smaller than the cists [(l)1.92m; (w)0.98m; (h)1.05m], conceivable parallels may be offered by the ca. 600–550 Elamite bronze “bathtub”-style coffins deposited in tomb chambers discovered in 1982 near the ancient settlement of Arjan and in 2007 near Ram Hormuz. These measure (l)1.32–?m (w)0.60–0.67m; and (h)0.57–0.60m (Wicks 2015, Appendix 1).

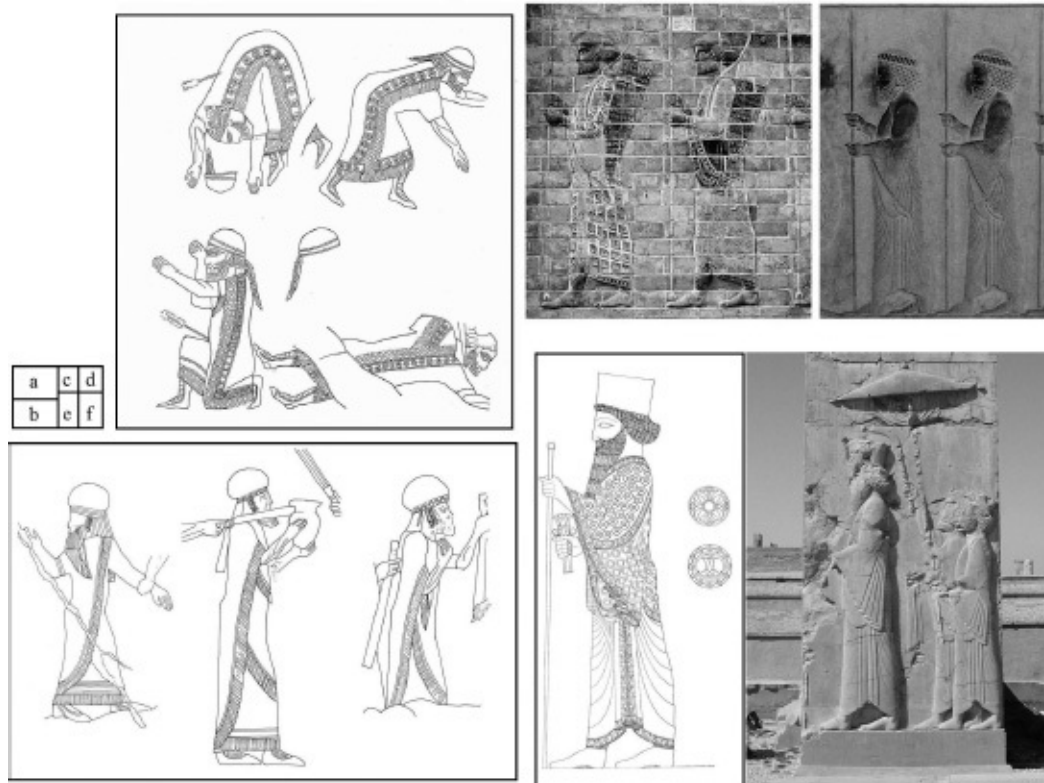
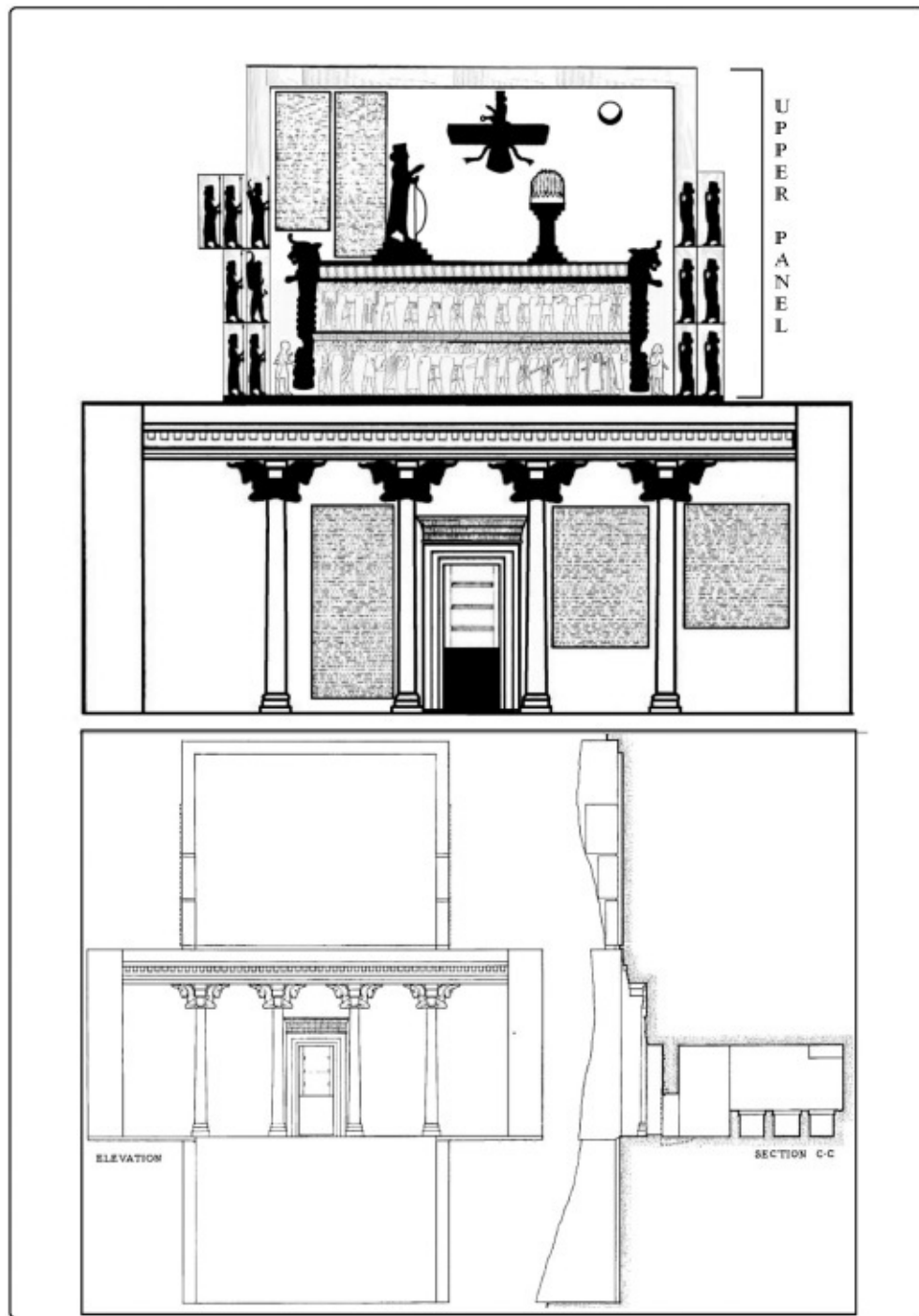


Figure 40.2 [a] Line drawings of the Elamite kings Te-Ummman (by the author after Sarre and Herzfeld 1910, Figure 78); and [b] Humban-Haltaš III (line-drawings by the author after Barnett 1976, Pls. 34. 64.); Representations of Persian royal bodyguards in different media (photographs by the author); [c] glazed tiles from Susa; [d] slab relief from Persepolis; [e] line-drawing of king Xerxes after relief in the main hall of the Harem building at Persepolis; [f] the Persian king under an umbrella at Persepolis (photographs by the author, line drawing after Tilia 1978: 54 Figure 6; Courtesy of the Oriental Institute of the University of Chicago).



[Figure 40.3 Façade, elevation and section of the Tomb of Darius I at Naqsh-e Rostam with modifications by the author \(upper line-drawings after Wolff published in Seidl 2003: 68, Figure 1; lower line drawing after Schmidt 1970: 83, Figure 32; Courtesy of the Oriental Institute of the University of Chicago\).](#)

The exterior of the tomb was carved with a cruciform façade whose central panel is an almost to-scale imitation of Darius' own palace façade at Persepolis (Perrot and Chipiez 1881: 551, 621, Figure 289; Schmidt 1970: 81; Figure 31; for measurements see Roaf 1978: 75). Exhibited atop the palace roof (upper panel; see [Figure 40.3](#)) is an elaborate religious scene centering on the figure of Darius, who stands on a three-stepped platform facing a fire altar

and two divine symbols: a figure in a winged ring and a solar/lunar-crescent (Schmidt 1970: 84–85). Darius and the fire altar are held aloft on a double-decked, stool-like platform by two rows of a total of 30 representatives of the subject peoples of the empire (14 on each level plus two in the corners). On both sides of the platform, framing the central scene, are three horizontal registers occupied by individuals oriented towards the center. On the left are seven weapon bearers. In the top and middle registers the two weapon bearers at the front are identified by epigraphs as the nobles Gobryas and Aspathines; the remaining five are unidentified spear-bearers. The three horizontal registers on the right are occupied by six weaponless nobles oriented to the left. Using the left hand, each holds his left garment sleeve up in front of his mouth in what may be understood as a gesture of mourning.

The overall structure of the façade is relatively simple, combining three large panels. The lower panel is vacant, the middle replicates the palace of Darius, and the space of the upper panel described above is defined by a central rectangular panel and three horizontal registers [see [Figure 40.3](#)]. Besides the use of horizontal registers, the structure of the composition was orchestrated via the orientation of the various participants, whose placement was planned according to social status. Hierarchy is established through proximity to Darius and the divine symbols, and is further defined between participants with a clearly articulated use of scale. The imposing 2.7 m tall figure of Darius dominates the entire composition. These same compositional techniques – the organization along horizontal registers and the use of location and scale to define rank amongst participants – are found on the Elamite sculptural reliefs carved at Kul-e Farah (henceforth also KF) in the valley of Izeh-Malamir [Figs. 40.7, 40.8, 40.9] (see Álvarez-Mon, Chapter 30 in this volume and forthcoming b).

Also worth considering are the close thematic parallels between Darius' tomb façade and the iconography of the monumental Elamite reliefs at Izeh-Malamir: the ruler facing the fire-altar/stand; the king raised on a platform; nobles and weapon bearers; and the garments of the elites.

Ruler Facing Fire-altar/stand. Three of the Izeh reliefs center on a large-scale ruler oriented towards a fire stand: KFI, KfV and Shekaft-e Salman I. The KFI fire stand (13 cm high) has an elongated conical base supporting a rounded stand with convex edge and the fire on top is represented as a conical shape with clear detail of flames. Comparable fire stands may be represented in KfV (60 cm high) and in the relief of Shekaft-e Salman I (78 cm high). The function of the KFI stand is manifest in the presence of a priest (identified in the epigraph) who extends both arms atop the fire altar, suggesting that he is engaged in making a ritual offering, possibly involving the meat – or the blood? – of the animals just sacrificed.

King Raised on a Platform. The image of Darius on a platform carried by personifications of the empire's provinces in atlas pose was also incorporated in the doorjambs of the Persepolis Council Hall (built late in the reign of Darius I or shortly after Xerxes I ascended the throne; Schmidt 1953: 107, 116), the doorjambs of the Throne Hall (dated to the reigns of Xerxes and

Artaxerxes I; Schmidt 1953: 129) [Figure 40.5], and in the Egyptian statue of Darius found at Susa [Figure 40.6]. The iconography of the atlas pose has a long history in ancient Near Eastern art and may have originated in the Hittite realm or in northern Syria, from where it passed into Assyria (Álvarez-Mon 2010b). The platform bearers represented in this pose in the KFIG and VI reliefs, however, offer specific templates for the platform bearers shown in Persian art [Figs. 40.7 and 40.8]. These Elamite examples depict men raising a large-scale individual on a platform above their heads. Their short hair, cap and long fringed garment suggest that they were a distinct group of individuals engaged in what can be considered ceremonies enacted in real life (Vanden Berghe 1984: 112–113). The notion that actual events may be depicted is supported by the monumental inscription engraved over the surface of the KFI relief (König 1977, no. 75) and is further strengthened by the existence in Darius' time of an annual ritual involving the king (or his representative) and leaders of the agro-pastoralist Uxians and Elymean highlanders in which mutual acknowledgement and bonds of loyalty were fomented through tribute or gift exchanges (Briant 1996: 731; 2002: 728).

Nobles and Weapon Bearers. The roles, weaponry and representation styles of Gobryas and Aspathines are closely associated with those of the high officers of the Elamite court depicted in the KFI, IV and VI reliefs as weapon bearers carrying braced composite bows, quivers and swords [Figure 40.7, register II] (Álvarez-Mon 2013, 2015, forthcoming a).

Garments of the Elites. The ornamentation of the finely textured Achaemenid Persian pleated court robe instituted at the time of Darius I follows formulas inherited from the Mesopotamian “golden sky” garment covered in metal appliqués and the Elamite elite fringed garments mentioned above in connection with Cyrus. In a previous work, I have suggested that the introduction of a new type of fabric (cotton) may have influenced the change of garment style (Álvarez-Mon 2011). At the same time, the disappearance of short sleeves and fringes and the introduction of an elegantly fanned, wide-sleeved robe is an innovation that reflects a conscious articulation of fashion which prized the language of fabrics and sought to enhance the range of visual communication by expanding the material surface of the garment. The long, pleated sleeves became the visual expression of wealth, luxury, power and prestige; no doubt accompanied by specific socio-political and economic connotations [see Figs. 40.2c-f].

The earliest depictions of this garment appear in the Bisotun relief where, intriguingly, some of the captive “false kings” who contested Darius' rule share a similar robe. Yet with the subsequent consolidation of power, the question of who were the legitimate members of the dominant class and had the distinction of wearing the court dress appears to have become a critical element in the visual and ideological program of the Empire. At Naqsh-e Rostam, where epigraphs specify the names of the various representatives of the empires, only the first and third individuals, the Persian and the Elamite (after the Mede), wear the long-sleeved Persian court garment. This visual conferring of privilege and honor reaffirmed the importance of the Elamites at the core of the Empire and was replicated again in the

depictions of platform bearers in the eastern doorway of the Council Hall, the Throne Hall and in the exceptional above-mentioned sculpture of Darius [Figs. 40.5, 40.6]. The statue, manufactured in Egypt, shows Darius in ceremonial court dress standing on a rectangular platform framed along the long sides by 12 individuals kneeling with upraised hands, each personifying a province of the empire (Razmjou 2002: 83; with refs.). Two representatives amongst this group have again been singled out for depiction in the long-sleeved Persian court robe: the Persian, positioned first, and the Elamite, positioned third.

The Persepolis apadana staircase reliefs

The *apadana* appears to have been constructed for the primary purpose of accommodating a vast gathering of people under a single roof. The *apadana* at Persepolis, planned and partially built during the time of Darius and completed by Xerxes I, was an architectural tour de force defined by a colossal 60.5 m² square hypostyle hall dissected by six rows of six stone columns. Access to the hall was provided via two identical sets of grand stairways, one located along the northern side of the building and one on the east side. The facades and parapets of these staircases were entirely covered with low reliefs representing a royal audience (Schmidt 1953: 82–90) [see [Figure 40.4](#)].

On the better-preserved eastern staircases, the iconography of the reliefs is structured within four main panels: the *Central Panel* depicting the king and prince under a canopy; the *Right Panel* depicting 92 royal guards and 64 nobles standing behind the ruler, oriented left; the *Left Panel* depicting 23 representative peoples of the imperial provinces facing the ruler, oriented right; and the *Inner Panels* depicting hundreds more royal guards (spearmen, shieldmen and archers). Including the Great King and the crown prince, no less than 811 individuals are shown in total (Roaf 1983: 29). An abbreviated version of the king giving audience was sculpted on the doorjambs on the northern side of the Throne Hall (or Hundred Column Hall) [[Figure 40.5](#)]. Each jamb is divided into six registers, the uppermost depicting the enthroned king under a baldachin (the crown prince is not present). Fifty royal guards are distributed in groups of ten along the five registers below. Subdivided into two groups of five, the guards stand facing each other on either side of a central axial line. The same individuals are depicted from a left and right perspective on the opposing doorjambs (Schmidt 1953: 134–137; Pls. 96–101).

Compositionally speaking, these reliefs follow the formula seen on the tomb of Darius, where horizontal registers dominate the structure, and scale, location and orientation are used to define rank amongst participants. Again, these are standard compositional features found in the Elamite monumental sculptural reliefs carved at Kul-e Farah [see [Figs. 40.7, 40.8, 40.9](#)] (Álvarez-Mon forthcoming b).

Further close parallels with Elamite monumental sculpture can be found in the

incorporation of iconography showing the ruler giving audience and receiving gifts (i.e. a tribute scene). The royal audience can be interpreted on three main levels: sacred, political/economic and celebratory/festive. These aspects are clearly related, but I will discuss them separately to bring their correspondences with Elamite art and ideology into sharper focus.

Sacred Dimension. The Persepolis audience scene is usually considered an adaptation of the Assyrian tribute scene, exhibited, for instance, on palace walls at Nineveh and Til Barsip (Root 1979: 237). In the view of Margaret C. Root (1979: 284), this adaptation involved a re-articulation of core imperial ideological messages, with a rejection of Assyrian realism – the portrayal of military subjugation and humiliation of tributaries – in favor of a purely Achaemenid version defined as “a scene of pious reverence”. This devoutness characterizes the new spirit of Persian art in which, according to Mark B. Garrison (2009: 52), elements of “upliftedness” or “ascension” permeate through the depiction of the divine and supernatural.

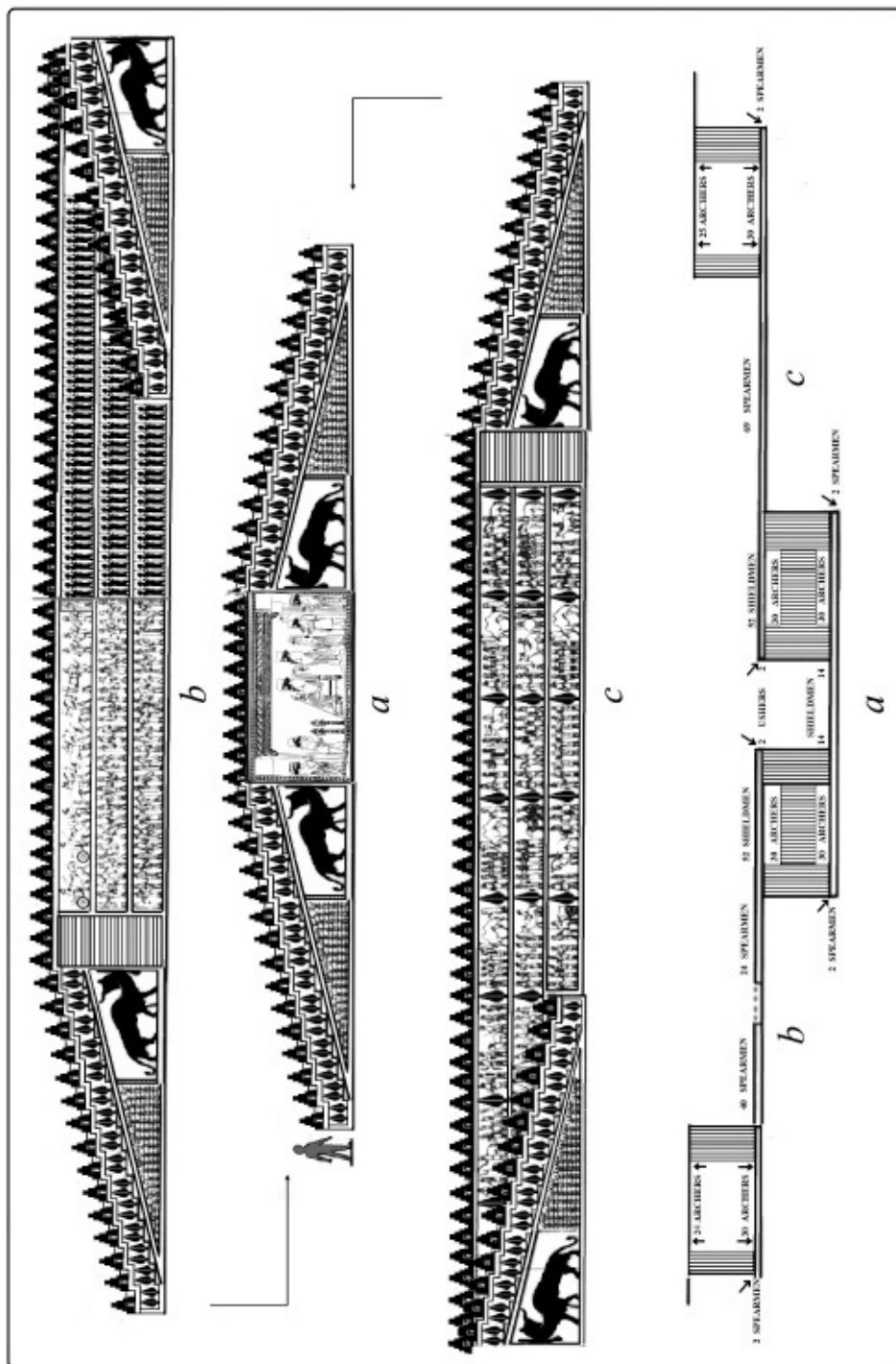
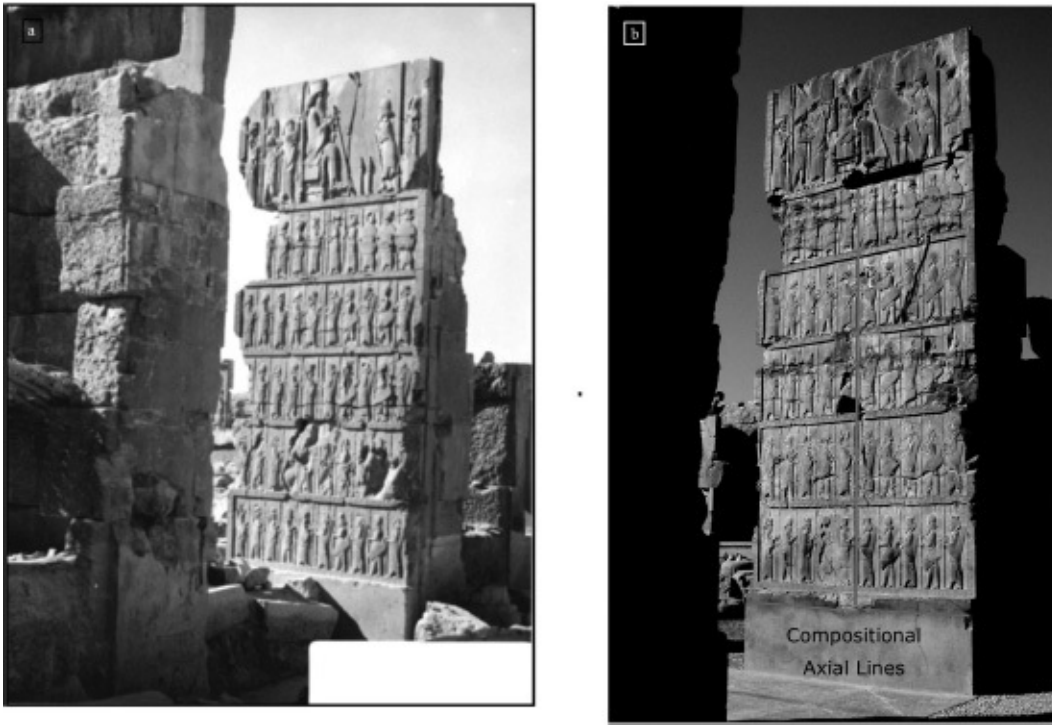


Figure 40.4 Composite line-drawings of the apadana staircase reliefs, North wing (after Schmidt 1953: 87, Figure 34; Krefter 1971, insert 4; and Roaf 1983: 50–51; 62–63, 65; Figs. 53, 61, 62, 63; with modifications by the author; Courtesy of the Oriental Institute of the University of Chicago).



[Figure 40.5 Throne Hall. Audience scene and guards of the eastern doorway in the northern wall, west jamb. \[a\] Oriental Institute Photograph P. 31. Courtesy of the Oriental Institute of the University of Chicago; \[b\] photograph by the author.](#)

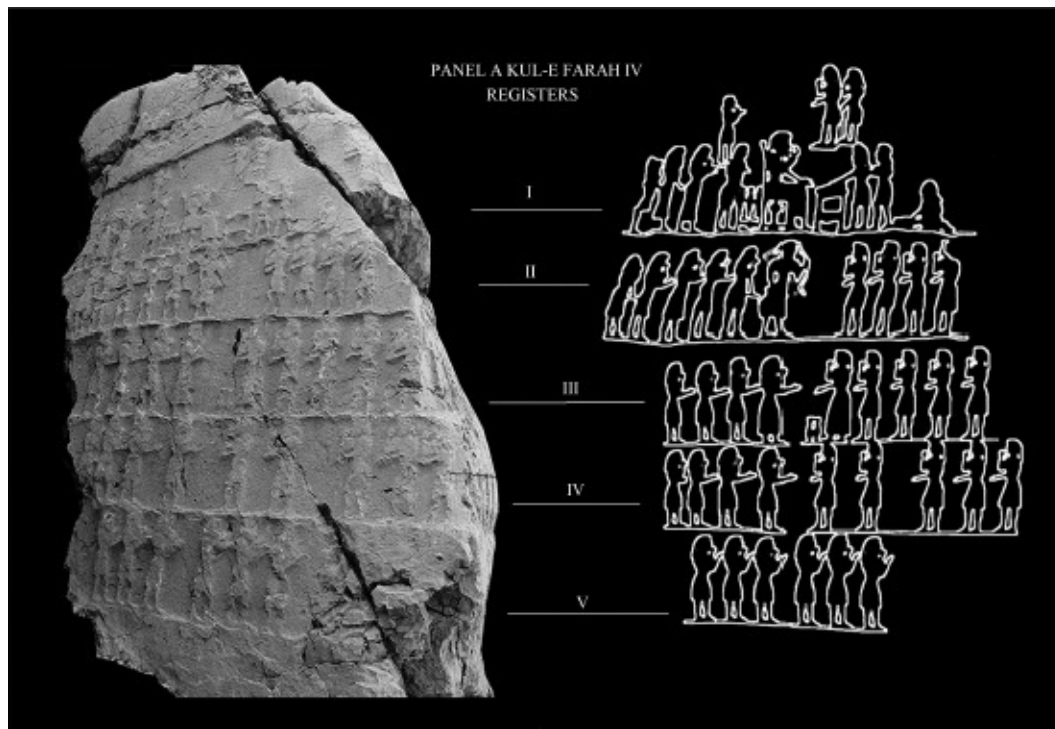
Recent examinations have highlighted that the core artistic and ideological properties of the Elamite monumental rock-cut sanctuary of Kurangun were co-opted and integrated into the Persepolis audience scene (Henkelman 2008: 226). Four correspondences in particular can be underlined: (1) the periodic pilgrimage of the community to the sanctuary is matched by periodic journeying to encounter the Great King; (2) the depiction of worshipers with direct access to Elamite divinities is matched by representatives of the empire in audience with the Great King; (3) the sanctuary of Kurangun is a cultic space informed by the natural environment and pulsing with divine vitality, while the audience scene from Persepolis is embedded in a new “aura of religiosity” (Álvarez-Mon 2014); (4) in both Elamite and Persian depictions flights of staircases became the material and virtual playground of interaction.

Political and Economic Dimension: The Spectacle of Royal Audience and Gift Giving. The Persepolis *apadana* columned hall may have served two practical purposes: to provide space under a single roof for a royal audience of matchless scope, and to offer “*a suitable backdrop to the elevated, enthroned monarch when he reviewed ceremonies or parades on the plain below*” (Stronach 2011). The hall was conceived as a monumental space for the holding of large-scale public ceremonial event/s with as many as 10,000 attendees (Herzfeld 1941: 227). Root (1979: 231) has argued that the reliefs may not depict a real ceremony, but had rather served as a “*metaphorical artistic synthesis of ideas of empire*” and “*represent a unified pictorial vision of the moment before the commencement of the presentation of gifts to the king by delegates from the subject nations*” (Root 1979: 240). Peter Calmeyer (1980: 56)

similarly found it difficult to take the reliefs at face value, expressing doubt that such an event had taken place inside the palace. He also queried the socio-economic background of “gift bearing”, suggesting that these scenes of tributaries are not to be understood as “historical” vignettes of a yearly event, but as “*an expression of what kingship meant to the Achaemenids, of their relationship with the peoples of their empire – or at least, of what they thought that relationship was and what they wanted to propagate*” (Calmeyer 1980: 57).



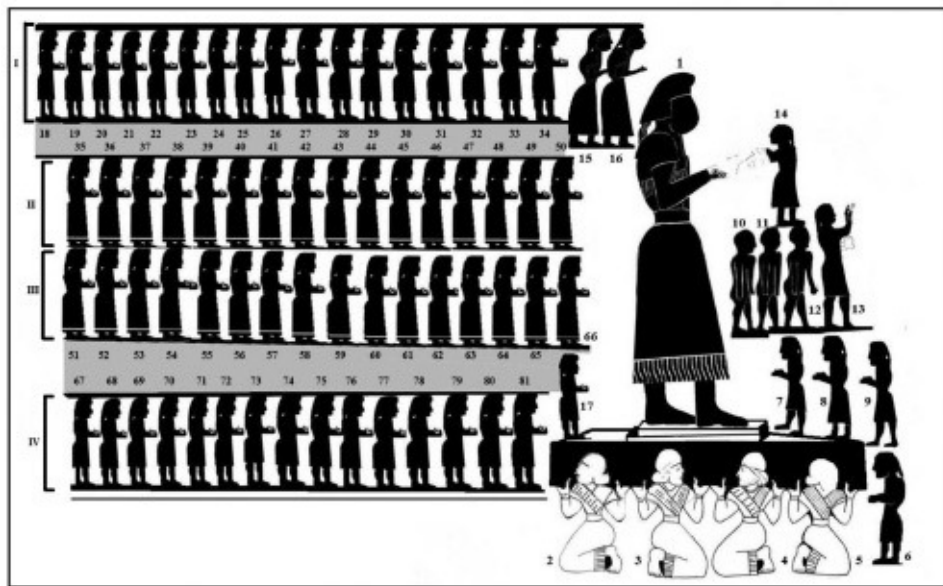
[Figure 40.6 Statue of Darius, National Museum of Iran, Tehran \(photographs by the author\).](#)



[Figure 40.7 Relief of Kul-e Farah IV, panel A \(photograph and line-drawing by the author\).](#)

The wealthy ca. 600 BC Arjan tomb chamber has brought significant additions to our knowledge of the royal audience scene in Elam (Álvarez-Mon 2010a). The burial assemblage included a large bronze bowl engraved with a central rosette encircled by five registers. Filling these registers are a series of visual narratives depicting a universe of miniature forms including 112 humans, 66 animals of 33 species, diverse trees and various artefacts. In registers V and IV a hunting party, mock battle and associated events unfold in the mountains and on the city fringe. In registers III and II a tribute procession and feasting with music instead take place inside the city. This iconography advertised the various personas of the king who, blessed by providence, performed the correct rituals, displayed his heroic deeds as hunter and presided at the center of high-level social exchanges involving hospitality, gift giving and feasting.

Of particular significance is a tribute scene in which the Elamite king, accompanied by the crown prince, is shown seated on a throne with his feet resting on a stool. Facing him is an individual (the “Grand Marshall”) bowing forward in a reverent gesture, followed by a procession of tribute bearers bringing various animals (Álvarez-Mon 2010a: 134, Pl. 64). Positioned at this important chronological juncture, the scene plays a significant role in bridging the divide between its Assyrian and Persian counterparts and speaks strongly for Elamite participation in the formation of the classic Persian audience and tribute scene.



[Figure 40.8 Relief of Kul-e Farah III, southern face \(photograph and line-drawing by the author\).](#)

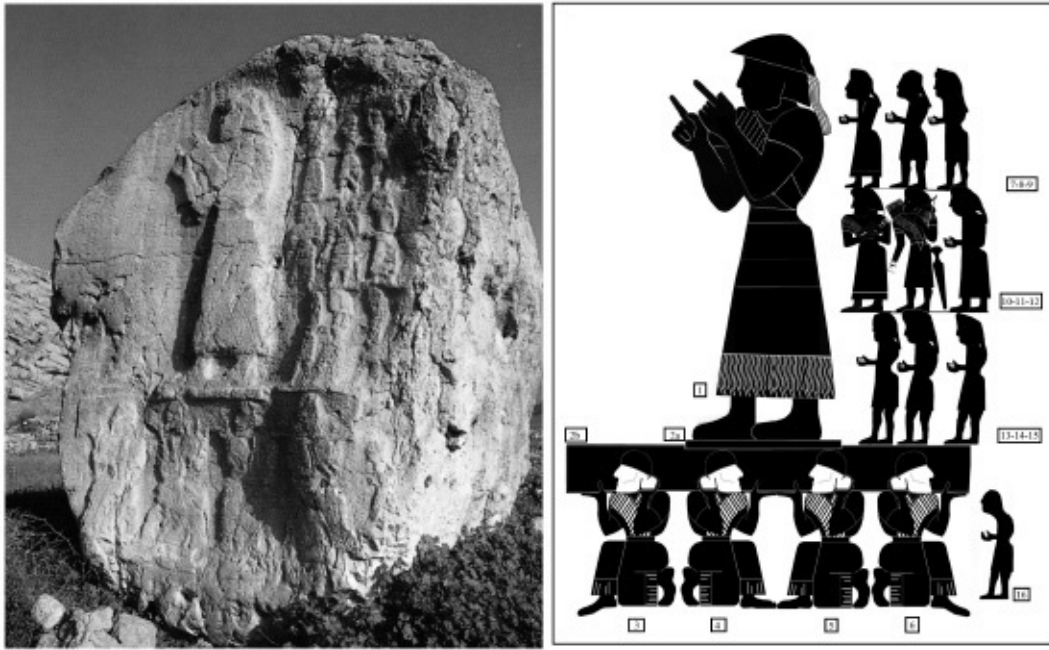


Figure 40.9 Relief of Kul-e Farah VI (photograph courtesy of A. Bakhtyar; line-drawing by the author).

Celebratory/Festive: The Spectacle of “Communal” Feasting. Grand scale communal feasting is notably absent from the monumental iconographic program of the Great King. Yet Elamite (Persepolis tablets) and Classical (Heraclides and Polyaeus) sources, as well as biblical texts (i.e. Esther and Daniel), envisaged that Persian ceremonies incorporating gift-giving and sacrificial banqueting/feasting had been vital to the establishment and negotiation of social hierarchy and the definition of royal authority (Sancisi-Weerdenburg 1995: 297–299; Briant 2002: 246–247; Henkelman 2010).

Recent examinations of the remains of columned halls dating between the 9th and 7th centuries BC indicate that “*the fundamental notion of the columned hall ... (was) widespread in western Iran*” (Gopnik 2005: 199). The examples from Hasanlu, Godin Tepe II, Tepe Nush-e Jan, Rumeilah (Qatar), Muweilah (Emirate of Sharjah) and possibly Kerkenesh Dag (Anatolia) underline the existence of a socio-cultural pattern that was not exclusively associated with an ethnic or political group such as the Indo-Europeans or Medes but was instead part of an emergent and widespread architectural expression of social power. This power was founded upon the strong cohesion of local elites and reinforced by gatherings in these columned halls for communal feasting on an impressive scale (Gopnik and Rothman 2011: 398–342).

Raising the possibility that the Persian *apadana* had also been the locus of feasting is the representation of food bearers climbing the southern staircases of the palace of Darius (also with a version in glazed bricks represented at Susa; Daucé 2010: 341). If there had been feasting at “the king’s table”, this presumably took place *after* the royal audience and its depiction was not prioritized in the sculptural program (it could, however, have been represented in a different media, for example, painting, but no evidence exists in support of such a possibility). The sacrifice of animals for ritual consumption is supported by Shahrokh

Razmjou's (2010: 243) argument for the existence of a sacrificial room in the north-west corner of the palace and by a small corpus of sealings found in the Persepolis Fortification archive depicting ceremonial sacrifice of animals (PFUTS0111, PFUTS0091, PFUTS0147, PFS0075; Garrison 2012). These images show striking iconographic similarities with sacrifice scenes at KFI, II and V, where communal feasting and animal sacrifice were central subjects of monumental display.

The manufacture of sculpture in relief: stone and brick, the *chaîne opératoire*

The year 1912 saw the discovery of the Old Persian text of the so-called “foundation charter”, a trilingual inscription (DSf) subsequently known in several exemplars commemorating the erection of the palace of Darius at Susa (Basello 2013). DSf lists a diversity of materials and work teams from different provinces that participated in the construction of the palace (Vallat 2010: 304–311). Varying interpretations of the text have resulted in nuanced views on the extent to which these workers should be considered artists (generating artistic blueprints otherwise absent from Persian tradition), artisans (skilled labor) or general labor force. Following the influential 1946 publications of Gisela Richter and Henri Frankfort, DSf was seen by many commentators to corroborate the opinion that Sardian (Lydian) and Ionian stoneworkers had directly contributed to the articulation of Persian artistic identity. It is, however, now apparent that the massive enterprise required for the building of Susa, Persepolis and other Persian palaces needs to be placed in the context of Near Eastern traditions of royal building (and related royal inscriptions) together with the employment of a multi-“ethnic” labor force for state-supported projects, as attested in texts from Persepolis and Babylon (Uchitel 1991; Henkelman and Kleber 2007).

From a practical viewpoint, one can elucidate further analogies with Elam through an examination of the operational sequence (*chaîne opératoire*) in the manufacture of the two main decorative techniques adopted to complement the architecture of Persian palaces: the molded, glazed, siliceous brick friezes at Susa and the sculpted low-relief stone panels at Persepolis [see [Figs. 40.2c, d](#)].

At the palace of Darius at Susa, the decorative program was characterized by large compositional friezes made of molded mud-brick and monochrome or polychrome siliceous bricks covered with glaze. It has been conservatively estimated that the ca. 13,000 glazed bricks recovered from the palace represent about 10% of the total (Daucé 2010: 328), but a much higher estimate by Jean Perrot (2010: 234) suggests that the decoration of the four main palace courtyards alone would have incorporated as many as a quarter of a million bricks. Fragments of molded brick friezes were also recovered at Persepolis, but here they were used only on a minor scale. Recent scientific analyses have substantiated the claim, articulated

already in 1893 by Dieulafoy, that the construction of the palace at Susa was a colossal endeavor requiring sophisticated technology, specialized labor force and substantial expenditure. Furthermore, they confirm that this industry was rooted in a pre-existing Elamite tradition (Caubet and Martinez-Sève 2005: 111–112; Maras 2010: 210).

The mass production of glazed bricks comprised a specific body of techniques. Based on the brick panel reliefs depicting royal guards at Susa, nine main manufacturing stages in the *chaîne opératoire* can be discerned [Figure 40.2c] (Azarpay 1994; Sauvage 1998: 33; Moorey 1999: 319–322; Maras 2010: 211–216; Daucé 2010: 327–342):

- (1) *Master Template*. A master template was produced in relief according to exact measurements for the depiction of human proportion.
- (2) *Master Prototypes*. A negative (hollow) prototype was created after the master template and segmented into standard brick-size dimensions to produce master prototypes in baked clay.
- (3) *Casting*. A frame in the form of a truncated pyramid was placed atop the master prototype and filled with a mixture of sand and lime or chalk.
- (4) *Drying*. The resulting siliceous molded brick in relief was sundried. It was probably after this stage that bricks were marked with black glaze (fitters' marks) to identify their exact placement in the reconstruction of the panel.
- (5) *First Firing*. The frame was removed and the bricks fired.
- (6) *Drawing*. The bricks were assembled together following the fitters' marks. A black glaze was used to draw the outline of decorative motifs such as bracteates, embroideries or hems.
- (7) *Second Firing*. The brick was fired for a second time to vitrify the raised outline.
- (8) *"Painting"*. The compartmentalized spaces created by the raised black outline (*cernures*) were filled with colored liquid glazes. The chromatic spectrum incorporated blue, green, yellow, white and brown glaze of multiple shades.
- (9) *Third Firing*. The bricks were fired for a third time to vitrify the glazes.

The complex manufacture of these bricks embodies the mastery achieved in the "*arts du feu*" where the marriage of modelling, drawing and painting materialized in a vitrified state. All stages required the firing and re-firing of the bricks at different temperatures reaching between 900 and 1000 degrees C (Álvarez-Mon 2010a; Daucé 2010: 330–331). Due to its different chemical composition, the black outline melted at a higher temperature than the colored glazes, preventing any mixing of the lines and colors during vitrification; a process comparable with metalwork *cloisonné*, where raised contours delineate compartmentalized spaces for color. Together with the use of siliceous brick, this trademark Elamite technique distinguishes the glazed brick found in Elam from its Assyrian and Babylonian counterparts.

In the manufacture of the *apadana* stone-carved reliefs at Persepolis, six main stages can be observed:

- (1) *Quarrying the Stone*. The quarry for the fine-grained black stone used to manufacture the *apadana* reliefs is located at Madjabad, 20 km (in a straight line) from Persepolis (Gondet 2015: 321).
- (2) *Design*. The desired design was plotted onto the surface of the stone following an exact canon of proportions and conventions well attested in the glazed brick panels produced in workshops at Susa (Davis-Kimball 1989).
- (3) *Carving the Stone*. Teams of stone carvers were assigned to remove different sections of the stone according to depth of carving required and the types of tools used (Roaf 1983).
- (4) *Etching*. The surface of the relief was etched with drawings of ornamental motifs such as bracteates, embroideries or hems. These drawings were meant to serve as guiding lines for the placement of color (Sweek and Simpson 2009: 86).
- (5) *Polychrome Painting*. The reliefs were painted. For a comparative illustration, see the royal guards depicted at Persepolis and on the glazed brick panels from Susa [Figs. 40.1e, f] (Nagel 2010).
- (6) *Surface Additions*. Details of metallic bracteates, jewelry and precious stone incrustations were added to the surface of the relief (Curtis 2005: 134, Figure 52).

This recognition of the *chaîne opératoire* in the manufacture of Persian stone relief sculpture and glazed brick panels is in contrast to standard perceptions of authorship that seek a unified piece of work created by a single artist – and therefore expect to see harmonization of anatomy with garment folds, bracteates, hems and color (Boardman 2000: 109–111, 117). Instead, a closer look at the manufacture of Persian stone sculpture exposes a body of techniques revealing different levels of excellence in art through different stages of material treatment. It also suggests that the sculptural program of the palaces of Persepolis was conceived following exact canons of proportions and conventions observed in the glazed bricks of Susa. Such correspondences indicate that both used similar templates, perhaps in the form of “pattern books”, baked clay, or perforated stencils to generate replicas in glazed bricks and stone. Through both avenues of artistic expression, teams of specialists carried out the various craft stages, which involved drawing, carving, modelling, etching, firing and, finally, the addition of surface color to provide a unifying aesthetic principle. The end result was a remarkable collaborative effort bringing together knowledge of artistic canons of proportions, diversity of materials, experienced craft making and the surmounting of complex technical challenges.

Construction of the traditional “Elamite-style” residential palace and *apadana* at Susa is

conventionally dated to around 520 BC, while the massive undertaking of erecting Persepolis may have begun around 507/500 BC (Perrot 2010: 468). Therefore, it is reasonable to suggest that significant elements of the sculptural artistic program of the Persian palaces may have been masterminded in the workshops of Susa. The implications of the multiple levels of relationships in the manufacturing processes invite the recognition of a complex new model for the genesis and characteristics of Persian monumental sculptural arts which takes into account the native glazed-brick industry at Susa and the compositional techniques and themes exhibited in the Elamite rock reliefs from Izeh-Malamir.

Metalwork

Metalwork is another form of art in which Elamite and Persian artistic parallels can be witnessed. The evidence provided by the metalwork assemblage from the Arjan tomb is complemented by the sumptuous array of grave goods unearthed in the Jubaji/Ram Hormuz tomb, including precious metal jewelry and a substantial volume of bronze metalwork (Shishegar 2015). The luxurious materials and an inscription on a ceremonial “ring” naming the late Neo-Elamite king Shutur-Nahhunte (ca. 575 BC) advocate an elite, if not royal, status for the tomb’s two occupants.

The Arjan and Ram Hormuz metalwork assemblages have introduced a new chapter in our understanding of the genesis of Persian art at around 600–550 BC. As the last manifestation of Elamite tradition, they exhibit key features recognizable from Persian art, including the above-mentioned tribute scene engraved on the Arjan bowl. Also significant are the *couchant* bulls incorporated into a candelabrum stand from Arjan, which perpetuate an Elamite tradition and provide a prototype for the Persian *apadana* bull capitals; the stylized lion heads on the Arjan beaker, candelabrum and ring, which share analogies with Persian lion heads in both monumental and portable art; and the bracelets with animal head terminals from Ram Hormuz find comparisons with those found in the “Persian princess” bronze coffin burial from Susa. A particularly prominent aspect of iconographic continuity can be found in the lion-headed griffin, which features on the Arjan “ring” and later plays a privileged role in monumental architecture, sculpture, glyptic and precious arts of the Achaemenid Empire. Far from being the manifestation of abrupt change or of a disintegrating culture, this artistic production suggests the revitalization of Elamite traditions in the late 7th and 6th century BC and a historical nexus favoring the continuity of local artistic production.

Conclusion

Looking at Persian arts through an Elamite lens forces a re-examination of traditional art

historical paradigms and recognition of the extent to which the marginalization of Elam has stripped Persian art of its intrinsic meaning. While other cultural influences and channels of transmission cannot be denied, the present summary has shown that Elamite artistic heritage provided basic manufacturing, artistic and ideological tenets for the genesis of Persian art and the representation of Persian royal power.

There is nothing extraordinary in the existence of artistic continuity within the heartland of Elam and Persia; what is unique, and in many ways remarkable, is the degree to which the rhetoric of power and self-representation of a nascent empire incorporated the Elamite past to articulate a new idealized vision of civilization. In this sense, Persian “exceptionalism” hinged on a pragmatic capacity to draw on the inherited wisdom of local traditions to generate a novel, idealized, universal message of unity, stability and harmony centering on and defined by the authority of the Great King. In short, Persian art was in its origins a predominantly autochthonous phenomenon.

References

- Álvarez-Mon, J. 2009. The “Elamite” Garment of Cyrus the Great. *The Antiquaries Journal*: 1–13.
- . 2010a. *The Arjān Tomb: At the Crossroads of the Elamite and the Persian Empires*, Acta Iranica 49. Leuven: Peeters.
- . 2010b. Platform Bearers from Kul-e Farah III and VI. *Iran* 48: 27–41.
- . 2011. Elamite Garments and Headdresses of the Late Neo-Elamite Period (7th–6th Century BC). *Archäologischen Mitteilungen aus Iran und Turan* 42: 207–235.
- . 2013. Braids of Glory, Elamite Sculptural Reliefs from the Highlands: Kul-e Farah IV. In: De Graef, K. and Tavernier, J. (eds.) *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives*, Mémoires de la Délégation en Perse 58. Ghent: Brill, 207–248.
- . 2014. Aesthetics of the Natural Environment in the Ancient Near East: the Elamite Rock-cut Sanctuary of Kurangun. In: Feldman, M. and Brown, B. (eds.) *Critical Approaches to Ancient Near Eastern Art*. Berlin: De Gruyter, 741–771.
- . 2015. Platforms of Exaltation, Elamite Sculptural Reliefs from the Highlands: Kūl-e Farah VI. *Elamica* 4: 1–50.
- . forthcoming a. The Bow of Elam, the Mainstay of their Might. In: Gorris, H., De Graef, K., and Tavernier, J. (eds.) *Susa and Elam II. History, Language, Religion and Culture*, Mémoires de la Délégation en Perse 59. Ghent: Brill,
- . forthcoming b. *Monumental Reliefs of the Elamite Highlands*. Eisenbrauns.
- Azarpay, G. 1994. Designing the Body: Human Proportions in Achaemenid Art. *Iranica Antiqua* 29: 168–184.
- Barnett, R.D. 1976. *Sculptures from the North Palace of Ashurbanipal at Nineveh (668–627 B.C.)*. London: Trustees of the British Museum.
- Basello, G.P. 2013. Le unità amministrative dell’impero achemenide (satrapie): il potere percepito dai popoli sottomessi e le immagini di ritorno. In: Prato, G.L. (ed.) *Ciro Chiamato per Nome* (Is 45, 4): *l’epoca Persiana e la nascita dell’Israele biblico tra richiamo a Gerusalemme e diaspora perenne*. Bologna: EDB, 37–97.
- Boardman, J. 2000. *Persia and the West, an Archaeological Investigation of the Genesis of Achaemenid Art*. London: Thames

and Hudson.

- Briant, P. 1996. *Histoire de l'empire Perse de Cyrus à Alexandre*, Achaemenid History 10. Leiden: The Netherlands Institute for the Near East.
- . 2002. *From Cyrus to Alexander. A History of the Persian Empire*. Winona Lake: Eisenbrauns.
- Calmeyer, P. 1980. Textual Sources for the Interpretation of Achaemenian Palace Decorations. *Iran* 18: 55–63.
- Canepa, M.P. 2015. Inscriptions, Royal Spaces and Iranian Identity: Epigraphic Practices in Persia and the Ancient Iranian World. In: Eastmond, A. (ed.) *Viewing Inscriptions in the Late Antique and Medieval World*. New York: Cambridge University Press, 10–35.
- Caubet, A. and Martinez-Sève, L. 2005. Les ateliers Élamites de Suse. In: Caubet, A. and Pierrat-Bonnefois, G. (eds.) *Faïences de l'Antiquité de l'Égypte à L'Iran*. Paris: Musée du Louvre, 111–112.
- Curtis, J. 2005. Jewellery and Personal Ornaments. In: Curtis, J. and Tallis, N. (eds.) *Forgotten Empire, the World of Achaemenid Persia*. London: I.B.Tauris, 132–149.
- Daucé, N. 2010. Les Briques Ornementales. In: Perrot, J. (ed.) *Le Palais de Darius à Suse*. Paris: PUPS, 327–347.
- Davis-Kimball, J. 1989. Proportions in Achaemenid Art. PhD Diss. (University of California at Berkeley).
- Dieulafoy, M. 1893. *L'Acropole de Suse d'après les fouilles exécutées en 1884, 1885, 1886 sous les auspices du Musée du Louvre*, troisième partie: faïences et terres cuites. Paris: Librairie Hachette.
- Frankfort, H. 1946. Achaemenian Sculpture. *American Journal of Archaeology* 50: 6–14.
- Garrison, M.B. 2009. Visual Representation of the Divine and the Numinous in Early Achaemenid Iran: Old Problems, New Directions. In: Egger, J. and Uehlinger, Ch. (eds.) *Iconography of Deities and Demons in the Ancient Near East*, Electronic Pre-Publications. www.religionswissenschaft.unizh.ch/idd/prepublications/e_idd_iran.pdf.
- . 2012. *Of Temples, Towers, Altars, and Fire Worship: The Ritual Landscape at Persepolis*. Lecture delivered on December 14, 2010. Metropolitan Museum of Art.
- Gasche, H. 2010. Les palais Perses Achéménides de Babylone. In: Perrot, J. (ed.) *Le Palais de Darius à Suse*. Paris: PUPS, 446–463.
- Gondet, S. 2015. Stratégies d'exploitation de la pierre à Persepolis. *Iranica Antiqua* 50: 279–332.
- Gopnik, H. 2005. Why Columned Halls? In: Curtis, J. and Simpson, St J. (eds.) *The World of Achaemenid Persia. History, Art and Society in Iran and the Ancient Near East*. London: I.B. Tauris, 195–206.
- Gopnik, H. and Rothman, M. 2011. *On the High Road: the History of Godin Tepe, Iran*. Costa Mesa, CA: Mazda Publishers.
- Henkelman, W.F.M. 2008. *The Other Gods Who Are. Studies in Elamite Iranian Acculturation based on the Persepolis Fortification Texts*, Achaemenid History 14. Leiden: The Netherlands Institute for the Near East.
- . 2010. Consumed Before the King. The Table of Darius, that of Irdabama and Irtashtuna and that of his satrap, Karkish. In: Jacobs, B. and Rollinger, R. (eds.) *Der Achämenidenhof/The Achaemenid Court*. Wiesbaden: Harrassowitz, 667–775.
- Henkelman, W.F.M. and Kleber, K. 2007. Babylonian Workers in the Persian Heartland: Palace Building at Matannan during the Reign of Cambyses. In: Tuplin, Ch. (ed.), *Persian Responses: Political and Cultural Interaction with(in) the Achaemenid Empire*. Oxford: Classical Press of Wales, 163–176.
- Hermann, G. and Curtis, J. 1998. Reflections on the Four-Winged Genie: A Pottery jar and Ivory Panel from Nimrud. *Iranica*

Antiqua 33: 107–134.

Herzfeld, E. 1941. *Iran in the Ancient East*. New York: Oxford University Press.

König, F.W. 1977. *Die elamischen Königsinschriften*, Archiv für Orientforschung Beiheft 16. Berlin – Graz.

Krefter, F. 1971 *Persepolis Rekonstruktionen: der Wiederaufbau des Frauenpalastes, Rekonstruktion der Paläste, Modell von Persepolis*, Teheraner Forschungen, Deutschen Archäologischen Institut, Abteilung Teheran 3. Berlin: Gebr. Mann.

Ladiray, D. 2010. La Résidence. In: Perrot, J. (ed.) *Le Palais de Darius à Suse*. Paris: PUPS, 208–221.

Lecoq, P. 1997. *Les inscriptions de la Perse achéménide*. Paris: Gallimard.

Malbran-Labat, F. 1995. Les inscriptions royales de Suse: briques de l'époque paléo-élamite à l'Empire néo-élamite. Paris: Réunion des musées nationaux.

Maras, S. 2010. A Reassessment of Brick Motifs and Brick-building Techniques at Achaemenid Susa. In: J. Curtis and St J. Simpson (eds.) *The World of Achaemenid Persia, History, Art and Society in Iran and the Ancient Near East*. London: I.B. Tauris, 207–229.

Moorey, P.R.S. 1999. *Ancient Mesopotamian Materials and Industries*. Winona Lake: Eisenbrauns.

Nagel, A. 2010, *Colors, Gilding and Painted Motifs in Persepolis: Approaching the Polychromy of Achaemenid Persian*. PhD Diss. (University of Michigan).

Perrot, G. and Chipiez, Ch. 1881. *Histoire de l'art dans l'Antiquité*, Vol. 5. Paris: Hachette et Cia.

Perrot, J. (ed.) 2010. *Le Palais de Darius à Suse*. Paris: PUPS.

Potts, D.T. 2010. Elamite Temple Building. In: Boda, M.J. and Novotny, J. (eds.) *From the Foundations to the Crenellations, Essays on Temple Building in the Ancient Near East and the Hebrew Bible*. Münster: Ugarit-Verlag, 49–70 and Appendix 2, 479–509.

Razmjou, Sh. 2002. Traces of Paint in the Statue of Darius. *ARTA* 2002/3: 1–2. Online publication retrieved 6/20/2010, www.achemenet.com/fr/tree/?/publications-en-ligne/arta.

———. 2010. Persepolis: A Reinterpretation of Palaces and Their Function. In: J. Curtis and St.J. Simpson (eds.) *The World of Achaemenid Persia: History, Art and Society in Iran and the Ancient Near East*. London: I.B. Tauris, 231–245.

Richter, G.M.A. 1946. Greeks in Persia. *American Journal of Archaeology* 50: 15–30.

Roaf, M. 1978. Persepolitan Metrology. *Iran* 16: 67–78.

———. 1983. Sculptures and Sculptors at Persepolis. *Iran* 21.

Root, M.C. 1979. *The King and Kingship in Achaemenid Art*. Acta Iranica 19. Leiden: Brill.

Sancisi-Weerdenburg, H. 1995. Persian food and political identity. In: Wilkins, J., Harvey, D. and Dobson, M. (eds.) *Food in Antiquity*. Exeter: University of Exeter Press, 286–302.

Sarre, F. and Herfeld, H. 1910. *Iranische Felsreliefs. Aufnahmen und Untersuchungen von Denkmälern aus alt- und mittelpersischer Zeit*. Berlin: E. Wasmuth.

Sauvage, M. 1998. *La brique et sa mise en œuvre en Mésopotamie des origines à l'époque achéménide*. Paris: ERC.

Schmidt, E.F. 1953. *Persepolis I*, Oriental Institute Publications 68. Chicago: The University of Chicago Press.

———. 1970. *Persepolis III*. OIP 70. Chicago: The University of Chicago Press.

Seidl, U. 2003. Wie waren die Achaimenedischen Doppelprotomen-Kapitelle ausgerichtet? In: Henkelman, W. and Kuhrt, A. (eds.) *A Persian Perspective Essays in Memory of Heleen Sancisi-Weerdenburg*. Achaemenid History 13. Leiden: The

- Netherlands Institute for the Near East, 67–77.
- Shishegar, A. 2015. *Tomb of the two Elamite Princesses of the House of King Shutur-Nahunte son of Indada, Neo-Elamite Period, Phase IIIB* (ca. 585–539 B.C.). In Persian. Tehran: ICHHTO.
- Stolze, F., Andreas, F.C. and Nöldeke, Th. 1882. *Persepolis, der Achaemenidischen und Sasanidischen Denkmäler und Inschriften von Persepolis, Istakhr, Pasargadae, Shâhpûr*. Berlin: Ahser & Co.
- Stronach, D. 1978. *Pasargadae: A Report on the Excavations Conducted by the British Institute of Persian Studies from 1961 to 1963*. Oxford: Oxford University Press.
- . 2011. Apadana. In: Yarshater, E. (ed.) *Encyclopaedia Iranica*. Online publication retrieved 4/09/2014, www.iranicaonline.org/articles/apadana.
- Stronach, D. and Roaf, M. 2007. *Nush-i Jan I. The Major Buildings of the Median Settlement*. Leuven: Peeters.
- Sweek, T. and Simpson, St J. 2009. An Unfinished Achaemenid Sculpture from Persepolis. *The British Museum Technical Research Bulletin* 3: 83–88.
- Tilia, A.B. 1978. *Studies and Restorations at Persepolis and Other Sites of Fârs Part II*, Reports and Memoirs 18. Roma: IsMEO.
- Uchitel, A. 1991. Foreign Workers in the Fortification Archive. In: *Mesopotamie et Elam: Actes de la 36eme Rencontre Assvriologique Internationale*, Gand. 10–14 July 1989. Paris, 127–135.
- Vallat, F. 1999. Le palais élamite de Suse. *Akkadica* 112: 34–43.
- . 2010. Les principales inscriptions achéménides de Suse. In: Perrot, J. (ed.) *Le Palais de Darius à Suse*. Paris: PUPS, 300–321.
- Vanden Berghe, L. 1984. *Reliefs Rupestres de l'Iran Ancien*. Bruxelles: Musées royaux d'art et d'histoire (Belgium).
- Wicks, Y. 2015. *Bronze 'Bathtub' Coffins in the Context of 8th-6th Century BC Babylonian, Assyrian and Elamite Funerary Practices*. Oxford: Archaeopress.

CHAPTER FOURTY-ONE

Elam in Achaemenid studies



Adriano V. Rossi

Since discussions on the topic of *Elam in Western scholarship from the Renaissance to the late 19th century* are the subject of an earlier chapter in this volume (see Potts, Chapter 1), I would like to start my own chapter by referring to the scientific climate in which the main reference works at the disposal of anyone interested in Achaemenid studies were conceived at the turn of the 20th century.

The *opus magnum* of Iranian philology, the *Grundriss der iranischen Philologie*, contains a historical synthesis in which Justi confined himself to analyzing the “hervorragende Stellung von Elam” (Justi 1896–1904: 417) in connection with the royal titles of Cyrus. No mention at all of Elam was made in the linguistic essay on Old Persian by Weissbach, barring the role that the Elamite versions of the Achaemenid inscriptions played in the reconstruction of the correct text (Weissbach 1896–1904: 72–74); to the same scholar is due the first modern edition of the Achaemenid Royal trilingual inscriptions (Weissbach 1911), which, among many other merits, generalized – after many oscillations in the late 19th century – the glottonym ‘Elamite’.¹

Since the late years of the 19th century, historians of the ancient Near East have found another important teaching aid in the *Geschichte des Altertums* by Eduard Meyer (1937). The narrative of the Iranization of the plateau was the established one, with an overwhelming role given to the Medians, but many subtle remarks were scattered here and there (sometimes in footnotes: see e.g. Meyer 1937: 182, n. 2: “Warum Kyros von Nabonid vor der Besiegung der Meder König von Anšan, im J. 547 König von Parsu genannt wird, wissen wir nicht”).

Ernst Herzfeld, pupil of Eduard Meyer and his tireless continuer in the cultural vision known in 1930s-Germany as *Kulturkreis* (this notion crossed those of ethnicity and race which had wide circulation in the reconstruction of the ancient world), was very active among scholars rejecting racist archaeological theories at the turn of the 1920s. His essays *Geschichte und Vorgeschichte* (Herzfeld 1933) and *Das Problem der hettitischen Kunst* (Herzfeld 1934), published respectively in 1933 and 1934, are centred around the refusal of the idea that scholars can identify archaeological data with ancient races and/or ethnic groups.

According to Herzfeld, migration was the exception, and the rule that should instead be

applied to explain relevant cultural changes was internal development. *Only* if two consecutive strata in the same archaeological site display entirely different material, and *only* if a relevant chronological interval can be excluded, and *only* if the same type of changes can be observed in an integrally preserved area, could we submit that a new cultural complex had arrived at that site.

Today these notions are taken for granted, but in archaeological research of the early 1930s, one had to fight hard to support them.

Since his early essays, Herzfeld appeared much more sceptical than Meyer about the supposed Indo-European speakers in the Mitanni area and their historical significance; in fact, he denied the importance that prevailing opinions in Germany tried to ascribe to possible “Indo-European groups” as agents of the alleged cultural changes. One should recall here that immediately after the installation in office of the Third Reich government, the Nazi institution for the promotion of Germanic Heritage (*Ahnenerbe*) created an *Abteilung für den Vorderen Orient* (endowed with funding for archaeological research in the Near East) with the task of investigating any form of so-called *indo-germanisch* influence (often defined in short as “Aryan influence”) on any major change in any ancient Near Eastern culture. To give an idea of the cultural climate prevailing in the field of ancient Near Eastern studies, some years before the Nazi takeover, the Assyriologist Carl Bezold had described Cyrus’ entry into Babylonia in 539 BC: “die indogermanische Rasse hatte das Erbe tausendjähriger Weltreiche angetreten, deren glänzendste Herrscher das Semitentum geboren hatte” [The Indo-European race became heir of the millenary domination of a world in which excellent sovereigns had been generated by the Semites] (Bezold 1910: 42).

On the interpretation of the term *arya-* in the few available Old Iranian sources, Meyer’s and Herzfeld’s positions progressively diverged. In 1912, when Meyer published *Der Papyrusfund von Elephantine* (Meyer 1912), he dedicated four pages to Darius’ account of his own deeds, the royal *res gestae*.

What interested Meyer was the circumstance that among Elephantine papyri, a partial Aramaic version of the Bisotun inscription of Darius the Great (DB) had emerged, and this demonstrated that the royal account had been ideated for circulation among the peripheries of the Achaemenid administration.

Why this interest from Meyer? Because in those years the first modern study of the Bisotun inscriptions had been published (King and Thompson 1907), and through this book all scholars had read the Old Persian translation of a short royal announcement of which only the Elamite version was previously known (DB/Elam. L). DB/Elam. L is an Elamite inscription, originally independent, which was translated in Old Persian and collocated at the end of the fourth Old Persian column; we do not have any Babylonian version for this short inscription.

Where is the disagreement on this short passage on which thousands of pages have been written (cf. most recently Rossi 2000 and Rossi in press)? Doubtful interpretations are

numerous, but particularly contested is OP *aryā* and its Elam. correspondent *hariya.ma*. In both languages it is clear that a location or a modality are at stake; but in relation to what? When only the Elamite version was known (prior to 1906–1907), Elam. *hariya.ma* was interpreted as one of three localizations on different epigraphic supports: “on stone, and on brick, and on hide”: therefore Elam. *harriya.ma* (also read *murriya.ma*) was interpreted as “on stone”. But when the Old Persian version became known (DB/OP §70), and OP *aryā* appeared in correspondence with Elam. *harriya.ma*, this *aryā* was interpreted as an occurrence of the base *arya-* as known in Darius’ and Xerxes’ titling: there *arya aryaciça* was translated as “*arya-* (Aryan), *arya-* as for his *ciça-*” (probably “descent”). Darius and Xerxes, so wrote Meyer, pride themselves even in their titulature on being of Aryan descent.

If the lexical basis appearing in DB/OP §70 was the same as OP *arya-* ‘Aryan’ in the royal titling, it remained to be seen why in that passage an ‘ethnic’ identity (or similar) was mentioned. To explain this aporia, a theory was born according to which Darius was referring to the *language* (or also, to the *script*) used for the whole Bisotun inscription: Darius would affirm “I have done (= written) this monument in *Arya-*, and subsequently it was copied on different supports, and circulated among the provinces”.

When Meyer wrote the pages on Bisotun in *Der Papyrusfund von Elephantine*, Herzfeld, who was preparing his doctoral dissertation on Pasargade under Meyer’s guidance, argued forcefully against other scholars, wanting to see in *aryā* in DB/OP §70 a reference to the language/script of the Achaemenids, and Meyer shared his pupil’s standing.

However, Meyer annotated in his *Geschichte* (Meyer 1937: 28): “*nach Darius’ Sprachgebrauch müssten wir die Sprache der altpersischen Keilinschriften arisch nennen* [according to Darius’ linguistic usage, we should call Aryan the language of Old Persian inscriptions]”. Even more explicit is Meyer’s annotation on *arya-* at the beginning of his chapter *Die Stämme der Arier* (volume I, ii tome): “*Der Name Arier ... findet sich ... gleichmässig bei den Indern und den Iranern als allgemeiner Volksname; daher nennt Darius seine Sprache ‘arisch’*” [“The name Aryans is found both among the Indians and Iranians as a general ethnic designation; because of this Darius calls his language ‘Aryan’”]. Meyer had therefore adopted, at least on this issue, the same projection of ethnic notions in antiquity which he strongly opposed in Gustav Kossinna’s theories.²

Coming back to the issue in *Paikuli*, Herzfeld (1924) proposed interpreting *arya-* in DB with reference to Aramaic script as used to render Persian utterances, and placing the origin of the ideographical process at the basis of Pahlavi as early as Darius’ time. Herzfeld submits that *arya-* was – paradoxically – Darius’ way to emphasize how a script ‘of Semitic design’, Aramaic, could be adapted to an “Indo-European language” such as Old Persian. Schaefer (1930) would be severely critical of this proposal, but Herzfeld’s idea derived from his profound persuasion that ethnicity and usage of any language need not necessarily be in connection, and that paradoxically ‘Aryan’ could be a fitting way to denominate a ‘Semitic’

script.

Today this reasoning might make people smile, but even in the 1970s Igor M. Diakonoff, while discussing the origin of OP script, still felt obliged to warn: “One should have learned by the second half of the twentieth century AD to keep physical anthropology apart from linguistics and social history” (Diakonoff 1970: 111, n. 35).

I think that what precedes can help one to better understand the gnoseological network in which one should place Achaemenid studies at the turn of World War II. One of the leading authorities in the field of art history of the ancient Near East, Henry Frankfort (1897–1954), wrote at that time: “There are no indications that the Persians possessed a monumental art of their own, and there is no reason to suppose that the accident of discovery has withheld from us monuments of the pre-Achaemenian period. We should hardly expect nomadic tribes to extend their interest beyond applied arts” (Frankfort 1946: 9).

A major contribution during those years came from A.T. Olmstead, who in the *Preface* to his *History of the Persian Empire* (Olmstead 1948: vii) could not fail to note how backward Achaemenid historiography was in comparison to the rest of ancient Near Eastern studies. Though he was the first historian of the Achaemenid period to eyewitness the recovery of the Persepolis tablets (e.g. Olmstead 1948: 178), his remarks rarely exceeded an emphasis on the multilingualism of Achaemenid bureaucracy, in which it was now clear that Elamite had played a substantial role (“Even more interesting is the practice witnessed by the letter. The order is given by Darius *orally*. It is repeated *orally* by Pharnaces. Then it is translated *orally* by the interpreter, and only after this it is written down by one of the official Elamite scribes. Due authentication, however, is given by the affixing of a seal” (Olmstead 1948: 177; the latest discussion of this process is by Tavernier 2008).

As for the rest, Olmstead’s stand was not so far from Richard Frye’s one, as written in a synthesis which remained for years a major reference point for Achaemenid historiography: “As the Iranian peoples settled down, their ideas of government and society were quite naturally influenced by the settled peoples, especially in western Iran where the Urartians in the north, the Mannaeans in Media, and the Elamites in the south, had established kingdoms with their own traditions and forms of state and society, centuries before the rise to power of the Medes and then the Persians” (Frye 1972: 84). The conclusion was anyhow always the same: “The ‘people’ or ‘folk’ was the Parsa, or Persian people, who occupied the land or province (*dahyu*) of Fars just as the Median people occupied Media. Finally the race, or the overall designation of all Iranian speaking peoples, was Aryan, a term which they shared with their Indian brethren to distinguish the Indoeuropean invaders from the native population” (Frye 1972: 84).

Around the same time, Walther Hinz published a small book describing the last phases of Elamite history after 1000 BC (the editors of *Cambridge Ancient History* had entrusted the history of Elam up to 1200 BC to Hinz and René Labat) containing the following statement:

“When Elam was incorporated into the Achaemenid Empire in 538, the Persians inherited its art and civilization. For some time before this, they had profited from an Elamite education; they had been countrymen and neighbours on their eastern border since about 695. Michael Rostovtzeff, in his *History of the Ancient World*, **even went so far as to claim** [my emphasis – AVR] that Cyrus the Great himself founded his culture and his ability to introduce political developments on the Elamite archetype” (Hinz 1973: 178). This means that one of the scholars who better knew – because of his Elamitic competences – the Perso-Elamite symbiosis emerging more and more clearly from the Persepolis tablets, considered as paradoxical a visionary statement formulated by Rostovtzeff half a century before (for Hinz’s adherence to the narrative of the migration/conquest by groups of ‘Aryan’ Iranian-speaking people imposing their rule over Elamite aborigines, see also – around the same time – Hinz 1976, I: 42–52, 56).

In Iranology *stricto sensu* (i.e. including Iranologists with an Indo-European,³ and not Assyriological, formation) a further lost opportunity to circulate the rapidly increasing findings emerging from the Elamite documentation to the wider scientific community was the publication (with great delay) of the volumes of the *Handbuch der Orientalistik* containing paragraphs on Old Persian written by Karl Hoffmann (1958) and Ilya Gershevitch (1968). In Hoffmann’s essay, reference to Elamite appeared only to explain doublets of “phono-syllabic” transcriptions originating from divergent Iranian traditions (Hoffmann 1958: 5); in Gershevitch’s essay, DB/OP §70 was interpreted as referring to the circulation of the Royal proclamation “in Akkadian **and Elamite** [my emphasis – AVR] on clay tablets [...] and in Aramaic on parchment” (Gershevitch 1968: 6), and a preliminary formulation of the alloglottography theory⁴ was offered (“the decline of original Old Persian inscriptional production after Xerxes [...] best attributed to loss on the part of professional scribes, of familiarity with the spelling conventions of the Old Persian script, and the loss, to the adoption of the Aramaic (**and I would now add the Elamite** [my emphasis – AVR]) language and script as usual means of written communication”, Gershevitch 1968: 30, *Addendum*).

Although, as reported by Cameron (1973: 51), the eminent British scholar H.T. Wade-Gery had already guessed on the basis of the location of the reliefs and the captions that the Elamite was the first of the three versions of the great inscription of Darius on mount Bisotun to be engraved, this had only recently become an accepted fact. The Old Persian version, written in a cuneiform script not used for any other language, and the Babylonian version, were added only later. This circumstance is shown by the alterations to the original plan of the carving of the rock-face necessitated by the addition of the Old Persian version.

The Iranian philologist who from the 1950s to the 1960s focused on the relationship between Elamite and Old Persian more than any other, was Ilya Gershevitch, who never interrupted his dialogue with the greatest Elamitologists of his time, viz. George G. Cameron (1905–1979, cf. Windfuhr 1990) and Richard T. Hallock (1906–1980, cf. Jones and Stolper 2003).

His three studies on *Onomastica persepolitana* represent a masterpiece of reconstructive ingeniousness, and remain a cornerstone in the most difficult field of the interpretation of OP words adapted to the rules of a script conceived for a phonemic system still resisting full interpretation: and their greatness excels all the more because in the years between 1966 and 1975, in the same onomastic collection (placed at the disposal of international scholarship by the generosity of R.T. Hallock), parallel interpretations by great scholars such as E. Benveniste, M. Mayrhofer and W. Hinz appeared.

The 1960s and early 1970s were the years in which Gershevitch formulated his vision of the relationship between Elamite (language and writing) and Old Persian (language and writing) in the practice of the Achaemenid chancellery. The background of this complex formulation brings us back to a double series of events: one was his stay in Chicago in the early 1960s, when he started a collaboration with Hallock (which would continue for years through correspondence), linked to a public lecture delivered in December 1965 in the University of Chicago; the other was the discovery (in winter 1963–1964), by the German archaeological mission led by H. Luschey and L. Trümpelmann, that the Elamite version of Darius' Bisotun inscriptions were the first to be carved in the stone (Luschey 1968).

The first scholar to publish his new visions deriving from the reanalysis of Bisotun was Walther Hinz (1968); Hinz's first conclusions seem to have been put forward in Tehran in 1966, in a paper read to the International Conference of Iranian studies attended also by Gershevitch.⁵ Hinz's explanation assumes that DB/OP §70 had not originally been planned because the Persian script did not exist at that time; but the Elamite version of §70, added after the creation of the script and after the addition of §70 to the fourth column of the Old Persian text, could not mean at lines DB/Elam. L:2–4:

v.u h.tuppi.me dae ikki hutta hariya.ma appa šašša inni šari

“ist dies **meine** [Italics by Hinz – AVR] Schrift, die ich anfertigen ließ, und zwar war sie auf arisch (=iranisch),” because the Elamite script was not Darius' own script!

Gershevitch's peculiar ideas about Elamite-Persian “bilingualism”, formulated over a period of seven years beginning in 1962, were first put forward in the lecture delivered at the University of Chicago (December 1965), and then in two of the six *Ratanbai Katrak Lectures* delivered at Oxford in spring 1968; the theory was subsequently made public through a short *Preface* placed before the pre-print of Hallock's contribution to the *Cambridge History of Iran*,⁶ circulated in Shiraz on the occasion of the Cyrus International Conference of 1971 (“sans en demander une discussion publique”, as J. Duchesne-Guillemin remarks in his preliminary note to Lecoq's essay on Old Persian cuneiform writing⁷), and finally in a definitive form in the long essay which is a written version of the paper read to the Philological Society on 11 March 1978 (marking among other things the entering of the neologism “alloglottography”

into Iranology and the general theory of writing).

According to Gershevitch's reconstruction, the Old Persian dictation of the Persian King would have been written down in Elamite and only later reproduced in Old Persian.

Gershevitch's ideas about the functioning of the Achaemenid chancellery entailed a series of consequences, the first of which related to the main historic question from which he had started, that is, the date of the introduction of Old Persian writing.

Notwithstanding the fact that Gershevitch was one of the scholars more interested in the interactions between Elamite-speaking and Irano-speaking peoples in Achaemenid Iran, his interests never went beyond a technical linguistic approach.

There is perhaps a connection between this attitude and his long editorial work on another lost opportunity in the 1970s–1980s, viz. the volume *The Median and Achaemenian Periods* of the *Cambridge History of Iran*. Possibly in addition to the editor's personal view is the well-known non-committal approach typical of all the *Cambridge Histories*; in any case, the masterly *The Evidence of the Persepolis Tablets* (Hallock 1985) does not refer to the problems of the cultural milieu in which the Elamite tablets were edited, and John Hansman's account in *Anshan in the Elamite and Achaemenian Periods* (Hansman 1985: 33: "Although the Elamites seem to have regained a measure of local autonomy in succeeding years [...] later Assyrian and Achaemenian advances finally put an end to independent Elam") does not add anything to the archaeologist's early essay in which he had identified Anshan with Pārsa (Hansman 1972). Here and there in the volume a certain change in attitude as far as Perso-Elamite interrelations are concerned is perceived ("Scholars have recently tended to stress the assumed connection between Cyrus' Anšan and Elam, and therefore look to Susa as a principal source", Cook 1985: 230); even Diakonoff, who in his previous essays had been more explicit on the subject,⁸ expressed such general statements as "The influence of the Elamite culture on the Old Persian was considerable" (Diakonoff 1985: 24), and came back to the usual terms of the "final destruction of the kingdom of Elam" (Diakonoff 1985: 23).

Even if the overall picture of the *Cambridge History of Iran* derives from views prevailing in the 1970s, it is in the mid-1980s that we have to position the decisive change of approach towards what Henkelman calls "the old diffusionist theory that made the Achaemenids direct heirs of full-formed Indo-Iranian culture" (Henkelman 2012: 933). A series of articles by Pierre de Miroschedji (1982; 1985; 1990) lay the foundations for the denial of the formation of a Persian identity as a linear development from an alleged Indo-Iranian phase to the Achaemenid ideology. Though centred on a somewhat inaccurate notion that would become a trademark of French Elamitology and archaeology (viz. "fin de l'Élam", which Amiet⁹ would rightly suggest should be reformulated in terms of cultural Elamo-Persian fusion), Miroschedji's essays mark the emergence of notions that would endure, such as "l'acculturation réciproque des deux groupes de population" (Miroschedji 1985: 302), "profondeur de la symbiose culturelle élamito-perse [...] les deux ethnies avaient déjà

longuement coexisté quand l’empire perse a été fondé” (Miroschedji 1985: 303); and the link between political disintegration and cultural fusion would appear in a new light: “cette séparation du Fars marque la désintégration définitive du “ grand Elam ”. L’union du Khuzistan et du Fars ne sera jamais reconstituée [...] C’est pendant les siècles obscurs de l’époque néo-élamite que ce clivage s’est opéré: le long isolement du Fars et sa conversion au pastoralisme nomade ont favorisé l’immigration d’éléments ethniques iraniens et des reconstructions tribales qui ont abouti à l’ethnogenèse des Perses” (Miroschedji 1990: 84).

Even if not all suggestions arising from that decade of innovation have been accepted and generalized (cf. e.g. Amiet 1992: 92: “En réalité, le haut-pays débordant d’ailleurs largement le seul Fars, n’était donc pas vide; il devait être peuplé de nomades dont au moins une élite restait fidèle à la tradition culturelle élamite. La question qu’il emporte désormais de poser est donc de savoir comment l’essor perse a pu se produire, ***une fois exclue comme très improbable une migration subite et massive*** [my emphasis – AVR]”), we have to acknowledge that it is thanks to French Iranology, French Elamitology and French ancient Near Eastern archaeology that this interpretative model appears in most available syntheses (e.g. Henkelman 2012: 95: “At the very minimum, this suggests a period of prolonged exposure to the Elamite and other resident cultures, if not entirely local development indeed, best described as the Persian ethnogenesis”; cf. already Henkelman 2003). Also Pierre Briant’s remarks on the origins of the Achaemenid state – more or less around the same time – contain *in nuce* the main lines¹⁰ of the descriptions of the “acculturation processes at work between the two groups”, taken again by the French historian in his *opus maius* (Briant 2002: 20–21, bibliography in pp. 878–879), and this book marks the diffusion of originally archaeological views in the wider circles of the historians of the Achaemenid state.

It does not matter if the original formulation by Miroschedji and Amiet to denote this process (*ethnogenèse des Perses/Persian ethnogenesis*) represents ultimately a partial, inaccurate revival¹¹ of a notion deriving from Russian historiography, widely used in the political debate on the question of nationalities in the 1930s (commented on already in the first edition of the *Bolshaya Sovetskaya Entsiklopediya*, 1926–1947): what matters is that we are by now, once and for all, distanced far from statements such as those which could appear only a hundred years ago in the article ‘Elam’ in the *Encyclopedia Britannica*: “they [i.e. the Elamites – AVR] gradually became completely Aryanized, and their agglutinative dialects were supplanted by the Aryan Persian from the south-east” (Sayce 1910: 141).

Notes

¹ See Basello 2004: 10, n. 98 regarding the penetrating but low-profiled remarks by Weissbach on Elamite onomastics, and *passim* for further information on Elamite studies at the turn of the 20th century.

- 2 Gustav Kossinna (1858–1931) made the decisive step towards a systematic approach to follow the distribution of ethnic groups via material traits. According to his theories, the distribution of distinct assemblages, which he called *Kulturgebiet* would correspond with the settlement areas of people known from written sources. On Kossinna cf. Hauser 2005: 533ff.
- 3 From this point of view one should consider as highly singular Dresden’s statement (1968: 171) that “A. Meillet was the first to publish a grammar of the Old Persian written within the framework of the Indo-European language group”: it is absolutely clear that the first 60–70 years of Old Persian philology totally coincide with the Indo-European formative phases of British, German and French research centres.
- 4 In an *Addendum* whose redaction could oscillate between the “slight revision” (July 1959) of the original manuscript (submitted in July 1955) and the publication, in delay, of the volume (1968). On Gershevitch and alloglottography, see Rossi 2006.
- 5 Note that Gershevitch (1979: 115: “in December 1965 [...] at a time when I knew as yet nothing of the German discoveries”) explicitly emphasises the reciprocal independency of his own and Hinz’s argumentations.
- 6 Hallock 1985. The *separatum* is generally noted as *Evidence* by Gershevitch himself.
- 7 Considering that Duchesne-Guillemin declares to have explicitly requested Pierre Lecoq “de reprendre, à la lumière des travaux récents, toute la question” (J. Duchesne-Guillemin in Lecoq 1974: 25), one wonders why in no passage of Lecoq’s paper the new vision of the relationship between Elamite versions and Old Persian ones as outlined by Gershevitch is discussed.
- 8 Cf. e.g. Diakonoff 1970: 110: “the Elamite usage [to add *-aš* at the end of loanwords from Old Persian – AVR] originated at a very early stage of Elamite-Iranian contacts [...]”; Diakonoff 1970: 110, n. 35: “In fact no one knows how early these contacts began [...] it has as yet not been established how early the Elamite colonists of Tepe Sialk and other aborigines, speaking presumably Elamite or a kindred language, had their first contacts with speakers of Iranian”.
- 9 Amiet 1992: 91: “la “ glyptique de la fin de l’ Élam ” qu’il serait préférable de définir comme “ élamo-perse ””.
- 10 Briant 1984: 93: “L’Etat perse s’établit dans une région qui avait constitué antérieurement le coeur de la puissance élamite, bien avant Suse qui, d’une certaine manière, ne fut qu’une position de repli. C’est assez dire que le royaume perse, à ses débuts, a revêtu les dépouilles élamites ou, si l’on veut, qu’il a réduit les souverains néo-élamites à faire de la Susiane un nouvel Elam”.
- 11 Inaccurate because “neutral” if not further qualified: “protsess složeniya ètničeskoy obšnosti na baze različnyx ètničeskix komponentov” is the definition given in the relevant article (signed: N.N. Čeboksarov) in the last available edition of the *Encyclopedia* (whose publication ceased after 1992).

References

- Amiet, P. 1992. Sur l’histoire élamite. *Iranica Antiqua* 27: 75–94.
- Basello, G.P. 2004. Elam between Assyriology and Iranian Studies. In: Panaino, A.C.D. and Piras, A. (eds.) *Schools of Oriental Studies and the Development of Modern Historiography. Proceedings of the Fourth Annual Symposium of the Assyrian and Babylonian Intellectual Heritage Project Held in Ravenna, Italy, October 13–17, 2001*, Melammu Symposia 4, with the

- collaboration of G.P. Basello. Milano: Università di Bologna – Istituto Italiano per l’Africa e l’Oriente, 1–40.
- Bezold, C. 1910. Die Kulturwelt des alten Orients. In: von Pflugk-Harttung, I. (ed.) *Weltgeschichte – Orient*. Berlin, 1–127.
- Briant, P. 1984. La Perse avant l’empire (un état de la question). *Iranica Antiqua* 19: 71–118.
- . 2002. *From Cyrus to Alexander. A History of the Persian Empire*. Winona Lake, IN (original edition: Paris, 1996).
- . 2005. Milestones in the Development of Achaemenid Historiography in the Era of Ernst Herzfeld. In: Gunter, A.C. and Hauser, S.R. (eds.) *Ernst Herzfeld and the Development of Near Eastern Studies, 1900–1950*. Leiden – Boston, 263–280.
- Cameron, G.G. 1973. The Persian Satrapies and related matters. *Journal of Near Eastern Studies* 32: 47–56.
- Cook, J.M. 1985. The Rise of the Achaemenids and Establishment of Their Empire. In: Gershevitch, I. (ed.) *The Cambridge History of Iran*, vol. 2: *The Median and Achaemenian periods*. Cambridge, 200–291.
- Diakonoff, I.M. 1970. The Origin of the ‘Old Persian’ Writing System and the Ancient Oriental Epigraphic and Annalistic Traditions. In: *W.B. Henning Memorial Volume*. London, 98–124.
- . 1985. Elam. In: Gershevitch, I. (ed.) *The Cambridge History of Iran*, vol. 2: *The Median and Achaemenian periods*. Cambridge, 1–24.
- Dresden, M.J. 1968. Survey of the History of Iranian Studies. In: *Iranistik. Literatur*, Handbuch der Orientalistik, Erste Abteilung: Der Nahe und Mittlere Osten, IV. Band, 2. Abschnitt, Lieferung 1. Köln, 168–190.
- Frankfort, H. 1946. Achaemenian Sculpture. *American Journal of Archaeology* 50/1: 6–14.
- Frye, R.N. 1972. The Institutions. In: Walser, G. (ed.) *Beiträge zur Achämenidengeschichte*, Historia, Einzelschriften 18. Wiesbaden, 83–93.
- Gershevitch, I. 1968. Old Iranian Literature. In: *Iranistik. Literatur*, Handbuch der Orientalistik, Erste Abteilung: Der Nahe und Mittlere Osten, IV. Band, 2. Abschnitt, Lieferung 1. Köln, 1–30.
- . 1979. The Alloglottography of Old Persian. *Transactions of the Philological Society* 77: 114–190.
- Hallock, R.T. 1985. The Evidence of the Persepolis Tablets. In: Gershevitch, I. (ed.) *The Cambridge History of Iran*, vol. 2: *The Median and Achaemenian periods*. Cambridge, 588–609.
- Hansman, J. 1972. Elamites, Achaemenians and Anshan. *Iran* 10: 101–125.
- . 1985. Anshan in the Elamite and Achaemenian Periods. In: *The Cambridge History of Iran*, vol. 2. Cambridge, 25–35.
- Hauser, S.R. 2005. History, Races, and Orientalism: Eduard Meyer, the Organization of Oriental Research, and Ernst Herzfeld’s Intellectual Heritage. In: Gunter, A.C. and Hauser, S.R. (eds.) *Ernst Herzfeld and the Development of Near Eastern Studies, 1900–1950*. Leiden – Boston, 505–559.
- Henkelman, W. 2003. Persians, Medes and Elamites. Acculturation in the Neo-Elamite Period. In: Lanfranchi, G.B., Roaf, M. and Rollinger, R. (eds.) *Continuity of Empire (?): Assyria, Media, Persia*, History of the Ancient Near East, Monographs 5. Padova, 181–231.
- . 2012. The Achaemenid Heartland: An Archaeological-Historical Perspective. In: Potts, D.T. (ed.) *A Companion to the Archaeology of the Ancient Near East*, Blackwell Companions to the Ancient World. Malden, MA – Oxford – Chichester, 932–962 and shared bibliography.
- Herzfeld, E. 1924. *Paikuli. Monument and Inscription of the Early History of the Sasanian Empire*, 2 vols. Berlin.
- . 1933. Aufsätze zur altorientalischen Archäologie I. Geschichte und Vorgeschichte. *Archäologische Mitteilungen aus Iran* 5: 1–48.

- . 1934. Aufsätze zur altorientalischen Archäologie III. Der Tell Halaf und das Problem der hettitischen Kunst. *Archäologische Mitteilungen aus Iran* 6: 111–223.
- Hinz, W. 1968. Die Entstehung der altpersischen Keilschrift. *Archäologische Mitteilungen aus Iran*, n.F. 1: 95–98.
- . 1973. *The Lost World of Elam*. New York (original edition in German: 1964; English edition: 1972).
- . 1976. *Darius und die Perser: eine Kulturgeschichte der Achämeniden*, 2 vols. Baden-Baden.
- Hoffmann, K. 1958. Altiranisch. In: *Iranistik. Linguistik*, Handbuch der Orientalistik, Erste Abteilung: Der Nahe und Mittlere Osten, IV. Band, 1. Abschnitt, Lieferung 1. Köln, 1–19.
- Jones, C.E. and Stolper, M.W. 2003. Hallock, Richard Treadwell. In: Yarshater, E. (ed.) *Encyclopædia Iranica*, vol. XI. New York, 592–594.
- Justi, F. 1896–1904. Geschichte Irans von den ältesten Zeiten bis zum Ausgang der Sāsāniden. In: Geiger, W. and Kuhn, E. (eds.) *Grundriss der iranischen Philologie*, vol. II. Strassburg, 395–550.
- King, L.W. and Thompson, R.C. 1907. *The sculptures and inscription of Darius the Great on the rock of Behistûn in Persia*. London.
- Lecoq, P. 1974. Le problème de l'écriture cunéiforme vieux-perse. In: *Hommage universel*, vol. III, Acta Iranica 3 = Première série, Commémoration Cyrus. Téhéran – Liège, 25–107.
- Luschey, H. 1968. Studien zu dem Darius-Relief in Bisutun. *Archäologische Mitteilungen aus Iran*, n.F. 1: 63–94 and Pls. 25–42.
- Meyer, E. 1912. *Der Papyrusfund von Elephantine*. Leipzig.
- . 1937. *Geschichte des Altertums*, vol. III: *Das Perserreich und die Griechen*. Berlin (1st edition: 1884).
- Miroschedji, P. de 1982. Notes sur la glyptique de la fin de l'Élam. *Revue d'Assyriologie et d'Archéologie Orientale* 76: 51–63.
- . 1985. La fin du royaume d'Anšan et de Suse et la naissance de l'Empire perse. *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 75: 266–306.
- . 1990. La fin de l'Élam: essai d'analyse et d'interprétation. *Iranica Antiqua* 25: 47–95.
- Olmstead, A.T. 1948. *History of the Persian Empire*. Chicago, IL.
- Potts, D.T. 1999. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*, Cambridge World Archaeology. Cambridge (2nd edition: 2016).
- Rossi, A.V. 2000. L'iscrizione originaria di Bisotun: DB elam. A+L. In: Graziani, S. (ed.) *Studi sul Vicino Oriente antico dedicati alla memoria di Luigi Cagni*, vol. 4. Napoli, 2065–2108.
- . 2006. *Ilya Gershevitch, Old Persian and Western Iranian Dialectology*. In: Panaino, A. (ed.) *The Scholarly Contribution of Ilya Gershevitch to the Development of Iranian Studies*. Milano, 69–84.
- . in press. Once again on DB/AE L and DB/OP iv 89–92. In: Schmitt, R., Rossi, A.V., Panaino, A.C.D., Filipponi, E. and Sadoski, V. (eds.) *Achaimenidica*, vol. I. Wien.
- Rostovtzeff, M. 1926. *A History of the Ancient World*, vol. I: *The Orient and Greece*. Oxford.
- Sayce, A.H. 1910. Elam. In: *The Encyclopædia Britannica*, vol. IX. New York, 140–141 (11th edition).
- Schaeder, H.H. 1930. *Iranische Beiträge I*, Schriften der Königsberger Gelehrten Gesellschaft. Geisteswissenschaftlichen Klasse 6/5. Halle.
- Tavernier, J. 2008. Multilingualism in the Fortification and Treasury archives. In: Briant, P., Henkelman, W.F.M. and Stolper, J.

M.W. (eds.) *L'archive des Fortifications de Persépolis. État des questions et perspectives de recherches. Actes du colloque organisé au Collège de France par la " Chaire d'histoire et civilisation du monde achéménide et de l'empire d'Alexandre " et le " Réseau international d'études et de recherches achéménides " (GDR 2538 CNRS), 3–4 novembre 2006*, Persika 12. Paris, 59–86.

Weissbach, F.H. 1896–1904. Die altpersischen Inschriften. In: Geiger, W. and Kuhn, E. (eds.) *Grundriss der iranischen Philologie*, vol. II. Strassburg, 54–74.

———. 1911. *Die Keilinschriften der Achämeniden*, Vorderasiatische Bibliothek 3. Leipzig.

Windfuhr, G.L. 1990. Cameron, George Glenn. In: Yarshater, E. (ed.) *Encyclopædia Iranica*, vol. IV. London – New York, 741–742.

Index



Words with more than 40 occurrences are not indexed. The letter š is indexed as *sh*. Diacritic and other small variations are not given as separate entries.

Abalgamash [186](#), [281](#)

Aboutaam [89–91](#)

Abraham [28–32](#)

Abu Chizan [372](#)

Abu Dabi [182](#), [184](#)

Abu Fandowa [458](#), [486](#)

Abu Salabikh [554](#)

Abu Sheeja [589–90](#)

Açina [810](#)

Acropole Archive/Tablets [166](#), [169](#), [171–2](#), [420](#), [488–9](#), [494–7](#), [651–3](#), [656](#), [661](#), [664](#), [707](#), [806–7](#), [811–12](#), [815](#), [819](#)

Adab [180–1](#), [183](#)

Adad [150](#), [152–4](#), [156](#), [189](#), [308](#), [312](#), [429](#), [526](#), [729](#), [803–4](#), [817](#), [821](#)

Ahiqar [13](#)

Ahuramazda [429](#), [460](#), [474–5](#), [830](#); *see also* [Auramazdā](#)

Aiampir [620](#), [732](#); *see also* [Ayapir](#)

Ain Kosh [258](#)

Aina- [167](#)

Akkad [35](#), [133](#), [205](#), [281–2](#), [291–2](#), [294](#), [309–15](#), [335](#), [443](#), [458](#), [466–7](#), [554](#), [609](#)

Akkadianization [154](#), [705](#)

Akkirara [169](#)

Akshak [180](#)

Akshin-kilik [168](#)

Aksimarti [172](#)

alabaster [72](#), [107](#), [206](#), [251](#), [288](#), [296](#), [472](#), [477](#), [553](#), [596](#), [609](#), [797](#)

Ala River [265](#), [747](#)

Alborz [121](#)

Alexander the Great [819–20](#)

Ali Kosh [363](#), [365–7](#), [371](#)

Al-Iṣṭakhrī, [421](#)

Alman [312](#), [315](#)

Altaic [16](#)

Alumidatum [213](#)

Al Untash-Napirisha [237](#), [241](#), [483](#), [523](#), [613](#)

Amara [149](#)

Amardian [417](#)

Amarna [491](#)

Amar-Suen [195–6](#), [208](#), [217](#), [282](#), [467](#), [747](#)

Amenemhat II [639](#)

Ammatena [265](#)

Ammisaduqa [204](#), [209](#), [223](#)

Amon [30](#), [34](#)

Amorite [147](#), [150](#), [153](#), [205](#), [207](#), [222–3](#)

Amraphel [12](#)

Amurru [153–5](#), [314](#)

Anarak [107](#), [122](#), [551](#)

Anatolia [86](#), [204](#), [550](#), [572](#), [843](#)

Andab Jadid [123](#)

Andada [661](#), [812](#)

Anigi [147](#)

Anih-Shushim [223](#)

Annunaki [208](#)

Annunītu [154](#)

Antiochus IV [18](#)

Anu [155](#)

Anzamannakka [818](#)

Anzanite [17](#), [659](#), [661–2](#), [701](#), [812](#)

Anzaze [421](#)

Anzukalli [311](#)

Apadana [42](#), [53](#), [56](#), [67](#), [70](#), [74](#), [166](#), [210](#), [258](#), [260–2](#), [372](#), [417](#), [495](#), [536–7](#), [576](#), [617](#), [651–3](#), [661](#), [752](#)

Apishal [189](#), [485](#)

Aplaya [168–9](#); *see also* [Appalaya](#)

Appalaya [257](#); *see also* [Aplaya](#)

Arabia [355](#)

Arabic (language) [412](#), [421](#)

Arachosia [810](#), [813](#)
Aram [28–9](#), [33](#), [333](#)
Aramaeans [169](#), [257](#), [324–6](#), [328](#), [330](#), [806](#)
Aramaic [13](#), [169](#), [412](#), [460](#), [474](#), [483](#), [491](#), [812](#), [814–15](#), [852–3](#), [855](#)
Arashtua [165](#)
Aratta [451](#)
Arawa [177](#), [180](#), [182–3](#), [185](#), [188–9](#), [194](#), [216](#), [281](#), [286](#)
Arina- [167–9](#)
Arioch [12](#)
Arisman [122](#), [124–6](#), [627](#)
Arjan [137](#), [262](#), [265](#), [267–8](#), [349](#), [420](#), [562–3](#), [689](#), [746–7](#), [769](#), [771](#), [795](#), [797](#), [805–6](#), [833](#), [841](#), [846](#); *see also* [Arrajan](#)
Armavir Blur [420](#)
Armenia [86](#), [420](#)
Arpachiyah [370](#)
Arpachshad [28](#)
Arrajan [746](#); *see also* [Arjan](#)
Arrapha [309](#), [311](#), [315](#), [324](#)
Arrian [819](#)
Artystone [491](#), [808](#), [810](#)
Arukku [165](#)
Aryan [2](#), [17](#), [475](#), [804–5](#), [808](#), [810](#), [852–4](#)
Ashbazana [493](#)
Ashishi [484](#)
Ashteroth [31](#)
Ashur [28](#), [496](#), [572](#), [776](#); *see also* [Assur](#)
Ashurnasirpal [164–5](#), [323](#)
Aspathines [835–6](#)
Aspavika [168](#)
Assur [631](#), [686](#), [776](#); *see also* [Ashur](#)
Astarabad [44](#)
Astyages [806](#)
Asuhur [180](#)
Atalia [689](#)
Ataliya [686](#)
Atekitin [701](#)
Athamaita [256](#), [684](#), [686](#)
Athibu [233](#), [237](#), [244](#)
Atossa [808](#)

Atta-hamiti-Inshushinak [255–6](#), [258](#), [420](#), [618–19](#), [684](#), [686–7](#), [809](#), [820](#), [832](#)

Attahushu [128](#), [633](#), [712](#)

Attametu [255](#)

Attar-kittah [233–5](#), [306–7](#), [471](#)

Attaru-uktuh [743](#)

Attasapir [172](#)

Attaten [168](#)

Auramazdā [816–19](#), [821–2](#); *see also* [Ahuramazda](#)

Avestan [14](#)

Awan [4](#), [128](#), [149](#), [177](#), [179](#), [181](#), [184–6](#), [188–9](#), [191–2](#), [203](#), [205–6](#), [213–14](#), [281–2](#), [286](#), [408](#), [411](#), [418](#), [428](#), [455](#), [466–9](#), [591](#), [607](#), [628–9](#), [633](#), [675](#), [677](#)

Ayapir [255–6](#), [264](#), [683](#), [687](#), [729–30](#), [735](#), [819](#); *see also* [Aiapir](#)

Azahar [148](#)

Baba Jan [690](#)

Bab-duri [325](#)

Babin, C. [42](#), [52](#)

Bactria [196](#), [291](#), [475](#), [483](#), [766](#), [768](#), [810](#)

Bactrian(s) [126](#), [157](#), [283–5](#), [289](#), [291](#), [456–7](#), [638](#), [640–1](#)

Bagabāzu- [167](#)

Baghdad [16](#)

Bahahutep [730](#)

Bahuri [257](#)

Bakabadada [816](#)

Balahute [256](#)

Baluchistan [184](#), [277](#), [284–5](#), [287–8](#), [714](#)

Bampur [184](#), [639](#), [714](#)

Banesh [125](#), [211](#), [287](#), [450](#), [576](#), [627](#)

Bani Surmah [629](#)

Barahshum [281](#); *see also* [Parahshum](#)

Barbarranamba [147](#)

Bardiya [808](#), [811](#)

Bashime [150](#), [216](#)

Bau [150](#), [152–3](#)

Behbahan [211](#), [562](#), [797](#)

Belilit [308](#)

Beltiya [558](#)

Bendebal [368](#)

Beshar [Valley 266, 746](#)

Bible [3, 11, 13, 28–31, 33, 35–6, 38, 177, 416](#)

Bilalama [155, 208, 215](#)

Birjand [121](#)

Bishapur [56](#)

Bismaya [783–4](#)

Bisotun [16, 164, 416, 418, 420, 431, 464, 474, 684, 698, 707, 807, 810, 813, 820, 831, 836, 852–3, 855](#)

Bit-Bunakki [251](#)

Bit-Hulummum [169](#)

Bit-Kunzubati [313](#)

bitumen [87–8, 93, 311, 370, 486, 561, 573, 617, 650, 686, 748, 752, 769](#)

Boirahmed [266](#)

Bormi [217, 221, 237, 265, 308, 419, 747](#)

Borujen [106](#)

British Museum [16, 42, 291, 349, 563, 683, 685, 699, 702, 785, 794, 797](#)

Bubilu [330, 353](#)

Budashir [182](#)

Bunban [185, 281](#)

Burnaburiash [235, 305, 682, 748](#)

Bus Mordeh [363–5](#)

Bushehr [43, 53, 101–2, 108, 212, 236–7, 257, 745](#)

Cambyes [36, 165, 170, 431, 434, 691, 809–11, 821](#)

Canaan, Canaanite, Canaanians [12, 28–32](#)

Cappadocian(s) [636, 638](#)

Caspian Sea [103, 216, 457, 561](#)

Catal Huyuk [367](#)

Ceos [792](#)

Chalcolithic [124, 624, 714](#)

Chaldea [46, 71, 333, 336–7](#)

Chedorlaomer [12, 31–2](#)

Chigha Sabz [211, 273, 581](#)

Chipiez, C. [41](#)

Choaspes [13](#)

Choga Ghavaneh [206–8](#)

Choga Pahn [206, 210, 236, 704](#)

Chogha Bonut [363, 365–7, 371](#)

Chogha Mish [92, 179, 210, 368, 370–3, 375–6, 494, 507, 517, 637, 753, 772, 781–2](#)

copper [93](#), [121](#), [134](#), [283–5](#), [365](#), [561](#)

cremation [268](#), [557](#), [749](#)

Ctesias [812](#)

curse [133](#), [264](#), [306](#), [464](#), [468](#), [471–4](#), [705–6](#), [732–4](#)

Cutha [325](#), [332](#), [335](#)

Cyaxares [806](#)

Cyrus Cylinder [17–18](#), [170](#), [806–8](#)

Dadusha [209](#)

Dagu [185](#)

Dahshur [46](#)

Damascus [324](#), [812](#)

Damīqtum [155](#)

Damkina [155](#)

Darab [287](#)

Dayāta- [168](#)

Deh Dumen [127](#)

Deh Hossein [121–3](#), [125](#)

Deh Luran [52](#), [101](#), [177](#), [179](#), [194](#), [211](#), [257](#), [304](#), [363–4](#), [370](#), [532](#), [534](#), [537](#), [542–4](#)

Dehno [233](#), [236](#), [470](#), [472](#)

Deioces [16](#)

Deir el-Medina [789](#)

Dezful [70](#), [236](#); *see also* [Dizful](#)

Dez River [101](#), [241](#), [258](#), [753](#), [755](#)

Dilbat [209](#)

Dilmun [455–6](#), [485](#)

Dimtu [154](#), [313](#), [315](#)

diorite [127](#), [186](#), [188](#), [709](#)

Diyala [150](#), [152](#), [155](#), [189–90](#), [192](#), [203](#), [208](#), [221–3](#), [257](#), [304](#), [307](#), [309](#), [312](#), [315–16](#), [329](#), [485](#), [588–9](#), [591](#), [628–9](#), [631](#), [638](#), [711](#)

Dizful [44](#), [419](#); *see also* [Dezful](#)

Dogonbadan [108](#)

Donjon [210](#), [398–9](#), [636](#), [752](#)

Dravidian [416](#)

Drehem [282](#)

Dur-Agade [485](#)

Dur-Athara [325](#)

Dur-Papsukkal [251](#)

Eanna [364](#), [372](#), [375](#)
Ebarti [194–5](#), [203](#), [208](#), [213–15](#), [217–18](#), [220–1](#), [305](#), [633](#), [677](#), [730](#), [768](#); *see also* [Yabrat](#)
Eber [28](#)
Ebla [278](#)
Edom [30](#), [34](#)
Egypt [5](#), [16](#), [28](#), [30](#), [32–4](#), [36–7](#), [42](#), [46–8](#), [65](#), [328](#), [450](#), [474–5](#), [569–71](#), [574](#), [576](#), [796](#), [810](#), [836](#)
Elammat [307](#)
Elburz [103](#)
Elephantine [852–3](#)
Elḥulḥul Cylinders [807](#)
Ellipi [325](#), [330](#), [806](#)
Ellipian [325](#), [331](#), [334](#)
Elvend [464](#)
Elymais, Elymaean [12–15](#), [18](#), [38](#), [421](#), [836](#)
Enheduanna [293](#)
Enki [150](#), [152](#), [605](#), [737](#), [818](#)
Enmebaragesi [286](#), [628](#), [702](#)
Epartid, Epartides [203](#), [205–6](#), [210](#)
Epirmupi [631](#), [633](#)
Erbil [193](#)
Ereshkigal [154](#)
Eridu [212](#)
Eriya [316](#)
Esfahan [179](#), [195](#)
Eshnunna [155](#), [203](#), [207–9](#), [215](#), [222–3](#), [307–9](#), [484](#), [611](#), [700](#), [711](#)
Eulæus [13](#)
Euphrates [294](#), [304](#), [315](#)
Euripides [792](#)

Fahliyān [611](#), [732](#), [814](#), [816](#)
faience [570](#), [572](#), [580](#), [680](#)
Failaka [182](#), [574](#), [784–5](#)
Farukhabad [372](#), [375](#)
Fasa [287](#)
Firuzabad [108](#)

Gabae [816](#)
Gambulu [325](#), [328–9](#)

Gananati [315](#)
Gandhāra [805](#)
Gaṅṇāmeh [820](#)
Ganj Dareh Tepe [367](#), [370](#)
Gaubaruva [804](#)
Gaumāta [435](#), [441](#)
Gelal River [750](#)
Ghabrestan [124](#)
Gideon [31](#)
Gilgamesh [155](#)
Ginadu [238](#), [244](#), [678](#), [681–2](#), [686](#), [751](#)
Girkinam [147](#)
Girnamme [208](#), [213–14](#)
Girra [150](#), [152](#)
Girsu [182](#), [194](#), [217](#), [373](#), [595](#), [699](#)
Gisat [255–6](#)
Gitika- [167](#)
Gizili [147](#)
Godin Tepe [120](#), [123](#), [179](#), [211](#), [280](#), [454](#), [627](#), [843](#)
Gomorra [12](#), [31](#)
Gonur [126](#), [290](#), [397](#), [455–6](#), [631](#), [638–40](#), [677](#)
Gordion [690](#)
Gorgan [639](#), [714](#)
Gu’abba [181–2](#), [185–6](#), [194](#)
Gudea [18](#), [122](#), [191–2](#), [282](#), [311](#), [397](#), [555](#), [585](#), [591](#), [595](#), [598](#), [776](#)
Gudea Cylinder A [786](#)
Gungunum [208](#), [216](#), [218](#), [221–2](#)
Gunilaha [185](#), [281](#)
Gupin [281](#)
Gutium [147–8](#), [151](#), [281–2](#), [287](#)

Habuba Kabira [373](#), [376](#)
Hakurtish [820](#)
Halil [180](#), [184](#), [278](#), [284–8](#), [596](#), [598](#), [605](#), [632](#), [745](#)
Halisrati [244](#)
Halman [312](#)
Haltete [426](#)
Halule [170](#), [252](#), [327](#), [332](#), [806](#), [808](#)

Hamadan [44](#), [53](#), [86](#), [191](#)

Hamitira [169](#)

Hammurabi [47](#), [51](#), [65](#), [71–2](#), [204](#), [209](#), [219](#), [223](#), [236](#), [305](#), [307](#), [483](#), [613](#), [711](#)

Hanni [255](#), [264–5](#), [267](#), [420](#), [464](#), [560](#), [620](#), [687](#), [689](#), [731–3](#), [735](#), [819](#), [832](#)

Harappa [632](#), [639](#)

Harappan [456](#), [710](#), [714](#)

Herzfeld, E. [85](#), [417](#), [490](#), [851](#)

Hidali/u [156–7](#), [169](#), [253](#), [256](#), [329](#), [796](#), [806](#), [814](#)

Hilimmu [324](#)

Hilmand [632](#), [639](#), [714](#)

Hindaru [325](#)

Hishmitik [526](#), [729–30](#)

Hittite [422](#), [424](#), [459](#), [836](#)

Huban-Shuturuk [255](#)

Huban-tahra [251](#)

Hudimiri [165](#)

Huh [737](#)

Huhme [737](#)

Huhnur(i) [109](#), [147](#), [149](#), [177](#), [191](#), [193–6](#), [213–14](#), [216](#), [221](#), [244](#), [256](#), [265](#), [282](#), [308](#), [467](#), [734](#), [748](#), [806](#)

Hulibar [196](#)

Hulili [169](#)

Huluppu [155](#)

Hurti [149](#), [177](#), [191](#), [194](#)

Hussaini [714](#)

Hutradadda [169](#)

Hutran [185](#), [729](#), [819](#)

Hutran-tepti [255](#), [619](#)

Idad(d)u [206](#), [214–16](#), [221](#), [469](#), [555](#), [633](#)

Idamaraz [711](#)

Idattu [208](#), [213–14](#)

Idattunapir [213](#), [215–16](#)

Idattutemti [213](#), [215](#)

Indada [255](#), [264–5](#), [563](#), [622](#); *see also* [Intata](#)

Indapipi [172](#), [254](#), [329](#), [333](#)

Indasu [148](#)

Intata [776](#); *see also* [Indada](#)

Isqan [155](#)

Itpun [169](#)

Itti-Marduk-balātu [316](#)

Ittish [169](#)

Jaffarabad [368](#), [370](#)

Jerusalem [28–30](#), [32–4](#), [36](#), [38](#), [255](#)

Jubaji [137–8](#), [262](#), [265](#), [267–8](#), [689–90](#), [747](#), [769](#), [775](#), [805](#), [846](#)

Kaftari [128](#), [207](#), [211–12](#), [287](#), [450](#), [456](#), [533–5](#), [542–3](#), [546](#), [633](#), [638](#)

Kakaritah [182](#)

Kakku [154](#)

Kamna- [167](#)

Kamulla [316](#)

Kandahar [421](#), [494](#)

Karta [213](#)

Kassite [4](#), [16](#), [51](#), [147](#), [149](#), [151](#), [153](#), [155–6](#), [204](#), [233–5](#), [243](#), [304–11](#), [313–16](#), [486](#), [558](#), [574](#), [576](#), [580](#), [613](#), [619](#), [636](#), [641](#), [644](#), [650](#), [656](#), [682](#), [745](#), [747–8](#), [750](#), [775](#), [805](#)

Kerman [6](#), [107](#), [120](#), [179–80](#), [184](#), [193](#), [216](#), [278](#), [288](#), [412](#), [466](#), [468](#), [597–8](#), [605](#), [607](#), [741](#), [743](#)

Kermanshah [315](#)

Kidada [661](#)

Kidinu [232–3](#), [237](#), [470](#)

Kidinuid [203](#), [205](#), [223](#), [232](#), [304–9](#), [419](#), [466](#), [470](#), [731](#)

Kikkit [168](#)

Kilahshupir [729](#), [731](#)

Kimash [122](#), [147](#), [149](#), [153](#), [177](#), [191](#), [194](#), [213](#), [282](#), [467–8](#)

Kindattu [196](#), [208](#), [213–14](#), [216](#), [590](#), [633](#)

Kinneru-damb [714](#)

Kirmashir [729](#)

Kitan [314](#)

Kittum [155](#)

Konar Sandal [180](#), [193](#), [277](#), [280–1](#), [283](#), [286–7](#), [397–9](#), [402](#), [408](#), [412](#), [455](#), [597–8](#), [628–32](#), [639–40](#), [642](#), [714](#), [741](#), [745](#)

Kossaeans, Kossaioi [17](#), [156](#)

Kuddakaka [166](#), [168](#)

Kudu-zulush [209](#), [219](#), [222–3](#)

Kudur-Lagamar [12](#)

Kudur-Mabuk [12](#), [209](#), [222](#)

Kudurru [252](#)

Kuganakā [810](#)

Kundupum [185](#)
Kunush-kadru [155](#)
Kurangun [170](#), [212](#), [266–7](#), [473](#), [557](#), [611–12](#), [614](#), [633](#), [677–8](#), [683–4](#), [732](#), [839](#)
Kurdistan [44](#), [624](#)
Kurdushum [806](#)
Kurigalzu [235](#), [305](#), [307](#), [512](#), [747](#)
Kurlush [265](#), [562](#), [747](#), [771](#)
Kur River [101–2](#), [108–9](#), [171](#), [211](#), [280](#)
Kuzzalu [155](#)

Lagamal [267](#), [729](#), [731](#), [736](#)
Lagash [18](#), [177](#), [180–3](#), [191–2](#), [194](#), [212](#), [216–17](#), [282](#), [286](#), [397](#), [555](#), [595](#), [624](#), [628](#), [776](#), [786](#)
Lahiru [324](#)
Lahmat [155](#)
Lallari [256](#)
Lalu-in-tash [168](#)
Lalu-sunkik [169](#)
Lamassu [155](#)
Ledrain, E. [43](#), [72](#)
Liyan [16](#), [53](#), [156](#), [206](#), [212](#), [221](#), [236–7](#), [245](#), [257](#), [307](#), [419](#), [471](#), [730](#), [741](#), [745](#)
Loreh River [750](#)
Lugal-anda [182–3](#), [213](#), [628](#)
Lugal-anemunDU [181](#)
Lullubum [147](#), [194](#), [281](#), [287](#)
Lulu [155](#)
Lycian(s) [157](#), [424](#)
Lydia [475](#)
Lydian(s) [28](#), [157](#), [844](#)

Macrides, C. [16](#)
Madaktu [254–5](#), [327](#), [329–30](#), [332–3](#), [335–6](#), [353](#), [731](#), [789](#), [794–6](#)
Madga [311](#)
Madjabad [845](#)
Magan [127](#), [281](#), [450](#), [456](#), [485](#), [554](#)
Maharlou Lake [107](#)
Mahtoutabad [627](#), [645](#)
Makkan [182](#), [184–8](#)
Makran [632](#), [639](#), [741](#)

Malamir [13](#), [17](#), [52](#), [155](#), [237](#), [244](#), [267](#), [617](#), [619–20](#), [769](#), [835](#)

Malcolm, J. [43](#)

Mamasani [102](#), [108](#), [212](#), [217](#), [266](#), [535–7](#), [539–41](#), [544](#), [611](#), [806](#)

Mammītum [153](#)

Mamu [154](#)

Manetho [16](#)

Mangisu [253](#)

Manhili [147](#)

Manneans [854](#)

Manusha- [167–9](#)

Manzat [470](#), [472](#), [729–30](#)

Mar-biti-ahhe-iddina [316](#)

Marduk [130](#), [155](#), [169](#), [257](#), [305](#), [476](#), [613](#), [656](#), [819](#)

Marduk-apla-idinna [325–7](#), [332](#), [334](#), [336](#)

Marduk-balāssu-iqbi [250](#), [323](#), [331](#), [333](#)

Marduk-kabit-ahhēshu [316](#)

Marduk-shumu-ibni [328](#)

Margiana [126](#), [149](#), [277](#), [287](#), [291](#), [456–7](#), [641–2](#), [766](#)

Mari [180](#), [193](#), [195](#), [203–4](#), [209](#), [221–3](#), [607](#), [609](#), [636](#), [639](#), [711](#)

Marlik [84](#), [87](#), [561](#), [644](#)

Martiya [256](#), [810](#)

Marun River [101](#), [265](#), [746](#)

Marzak [152](#)

Mashti [265](#), [267](#), [434–5](#), [729](#), [733](#), [735](#)

Matannan [810–11](#)

Matka [311](#), [315](#)

Matku [310](#)

Mazdara- [169](#)

Melchizedek [32](#)

Meluhha [149](#), [184–6](#), [188](#), [281](#), [286](#), [293](#), [485](#)

Mesanepada [628](#)

Meskalamdug [291](#), [628](#)

Metropolitan Museum of Art [80–1](#), [85](#), [87](#), [89](#), [291](#), [674](#), [677](#), [682](#)

Mianab [210](#)

Midas City [690](#)

Midianite [31](#)

Minoan Linear [387](#)

Mirabad [103](#)

Miri Qalat [627](#), [632](#), [639](#), [714](#)
Mishime [177](#), [180](#), [182](#), [286](#)
Mishimruh [245](#), [471](#)
Mitanni [574](#), [852](#)
Mitilaksar [169](#)
Mittashu [282](#)
Moab [30](#), [34](#)
Mohenjo-daro [639](#)
Mozzafer ed-Din Shah [44–5](#), [70](#)
Mugra(t) [155](#)
Mundigak [284–5](#), [639](#), [714](#)
Murabishtu [325](#), [331](#)
Mushezib-Marduk [327](#), [334](#)
Mussian [52](#)

Nabbazabba [817](#)
Nabium [154](#)
Nabonidus [476](#), [807](#)
Nabonidus Chronicle [18](#), [691](#), [807](#)
Nabopolassar [255](#), [698](#)
Nabu [355](#), [656](#), [819](#)
Nabu-ahhe-iddin [327](#)
Nabu-bel-shumati [254](#), [330–3](#)
Nabu-damiq [342–3](#), [346](#)
Nabu-kudurri-usur I [236](#)
Nabu-naṣir [257](#)
Nabu-shuma-ishkun [251](#)
Nabu-shumu-eresh [328](#)
Nabu-ushallim [328](#)
Nabu-zer-kitti-lishir [327](#), [332](#)
Nagutu [313](#)
Nahhiti [185](#)
Nahor [28](#)
Nal [714](#)
Namazga [283–5](#), [632](#)
Namri [315](#), [333](#)
Napkilapal [168](#)
Napratep [526](#), [730](#)

Naptaka- [167](#)

Napupu [168](#)

Naqadeh [46](#)

Naqsh-e Rostam [170](#), [266–7](#), [464](#), [473](#), [557](#), [621](#), [633](#), [684–5](#), [733](#), [769](#), [818](#), [820](#), [831–2](#), [834](#), [836](#)

Narundi [185](#), [187](#), [468](#), [586](#), [588](#), [594](#), [596](#), [607](#), [609](#), [675](#)

Nasr ed-Din Shah [42](#), [46](#), [70](#)

Na'id-Marduk [327–8](#)

Nebuchadnezzar I [305](#), [315–16](#), [473](#), [580](#); *see also* [Nabu-kudurri-usur I](#)

Nebuchadnezzar II [30](#), [35](#), [806](#), [830](#)

Nemetti-Marduk [315](#)

Nemrut Dag [367](#)

Neor Lake [103–4](#)

Nergal [150](#), [152](#), [154](#), [406](#), [737](#)

Nergal-ushezib [326](#)

Nibe [325](#)

Nimrud [251](#), [268](#), [563](#), [686](#), [689](#), [747](#), [831](#)

Ninazu [155](#)

Ninegalla [152–4](#)

Nineveh Letters [172](#), [257](#), [417](#), [420](#), [489](#)

Ningal [153–5](#)

Ningirsu [150](#), [180](#), [183](#)

Ninhursag [51](#), [128](#), [133](#), [150](#), [189](#), [555](#), [558](#), [586](#), [735](#), [737](#), [768](#)

Ninkarak [150](#), [189](#)

Nirah [353](#)

Nisaba [150](#)

Nubians [157](#)

Nunu [153–4](#)

Nurabad [212](#), [266](#), [535](#), [537](#), [539](#), [544](#), [627](#), [746](#), [806](#)

Nusku [526](#), [731](#), [749](#)

Nuzi [147](#), [149](#), [309–11](#), [313](#), [315](#), [496](#), [573](#), [644](#)

Oruru [255](#), [733](#), [735–6](#)

Oxus [276–8](#), [283–5](#), [287–9](#), [291–2](#), [556](#), [632](#), [638–9](#), [641](#), [714](#)

Ozbaki [179](#), [385–6](#), [627](#)

Paikuli [853](#)

Par-Uli [441](#), [473](#), [558](#), [617](#), [683](#), [699](#)

Parahshum [177](#), [180](#), [184](#); *see also* [Barahshum](#)

Parishan [103–4](#)

Parnaka [434–5](#), [491](#), [497](#), [653](#), [655](#), [657](#)

Parsumash [165](#), [251](#), [806–7](#)

Parthian [36](#), [50](#), [238](#), [460](#), [581](#), [741](#), [750](#)

Pataweh [611](#)

Patirapa- [166](#), [168](#)

Pelala [443](#)

Peleg [28](#)

Perrot, G. [41](#)

Peytul [206](#), [212](#), [257](#)

Phaidyme [821](#)

Phrygian (language) [491](#)

Phrygian(s) [157](#), [690](#)

Pilasqu [309](#)

Pilazkapulku [309](#)

Pillatu [324](#)

Pinikir [185](#), [256](#), [267](#), [526](#), [558](#), [580](#), [614](#), [729](#), [764](#), [771–2](#), [819](#)

Pininkir [712](#)

Pirhi-Amurru [155](#)

Pittit [421](#)

Pizlume [165](#)

Polyaenus [843](#)

Pontus [12](#)

Pottier, E. [53](#), [73–4](#)

Puhutu [313](#)

Puktena [435](#)

Pulvar [101](#)

Puqudu [324–5](#)

Puzrish-Dagan [149](#), [152](#)

Qabr Sheykheyne [570](#)

Qadamgāh [820](#)

Qaplantu [87](#)

Qasr-e Abu Nasr [494](#)

Qasr-e Shirin [45](#)

Qatna [711](#), [714](#)

Rabibi [508–11](#)

Radanu River [316](#)

Rashi [155](#)

Renan, E. [66](#)

Reu [28](#)

Rimku [155](#)

Rishap-La [245](#), [471](#)

Ruhuratir [156](#), [467](#), [526](#), [729–30](#)

Ruksinum [152](#)

Ru'ua [325](#)

Sabum [109](#), [177](#), [184–5](#), [194](#), [213](#)

Sakidēva- [168](#)

Sakurrazish [821](#)

Salem [32](#)

Samaria [28](#), [30](#), [34](#), [324](#)

Samati [156](#), [171](#), [420](#), [489](#), [805](#), [808](#)

Samos [562](#)

Samsuiluna [743](#), [753](#)

Sapum [147](#), [281](#)

Sarlagab [281](#)

Sarpol Zohāb [312](#)

Sarvak [563](#)

Sasanian, Sassanid [101](#), [108](#), [238](#), [265](#), [421](#), [460](#), [684](#), [747](#), [769](#)

Scythian, Scythians [32](#), [417](#), [475](#)

Scythic [15–17](#)

Sealand [146](#), [155](#), [252](#), [254](#), [304](#), [327–8](#), [330](#), [698](#)

Seh Gabi [624](#)

Sem [11](#), [15](#), [28–9](#), [312](#)

Sennaar [12](#)

Septuagint [36](#), [38](#)

Serug [28](#)

Sesonch [16](#)

Shaduppum [611](#)

Shah Tepe [714–15](#)

Shahi Tump [714](#), [719](#)

Shahr-e Sokhta [179](#), [278](#), [280](#), [283–5](#), [385–6](#), [451](#), [627](#), [632](#), [638–9](#), [714](#), [745](#), [775](#)

Shala [526](#)

Shali'amu [185](#)

Shalla [232–3](#)
Shamash [189](#), [776](#)
Shamshi-Adad V [323](#), [331](#), [334](#), [711](#)
Shamshi-Addu I [209](#), [219](#), [222](#)
Sharafabad [372](#)
Shargapi [186](#)
Sharjah [843](#)
Sharkalisharri [281](#)
Shashrum [193–4](#), [196](#); *see also* [Shemshara](#)
Shati-hupiti [255](#)
Shatilu [213](#)
Shelah [28](#)
Shemshara [193](#), [209](#), [222](#); *see also* [Shashrum](#)
Shenkuru [310](#)
Sheplarpak [204](#), [209](#), [222](#)
Sherihum [183–5](#), [187](#), [281](#)
Sherizza [155](#)
Shidgau [185–6](#), [281](#)
Shigrish [213](#)
Shikaft-e Salman [15](#), [17](#), [263](#), [265](#), [560](#), [617](#), [622](#), [681](#), [683–4](#), [690](#), [732–3](#), [735](#), [769–70](#), [792](#), [835](#)
Shilhina-hamru-Lakamar [316](#), [474](#)
Shilhite [732](#)
Shimut [151–2](#), [154](#), [185](#), [441](#), [526](#), [729–30](#), [737](#), [817](#), [819](#)
Shiraz [107](#), [746](#), [810](#), [856](#)
Shortugai [638–9](#)
Shubat-Enlil [223](#)
Shubula [155](#)
Shudda [155](#)
Shugaliens [154](#)
Shuhnir [150](#)
Shullaggi [806](#), [811](#)
Shulpae [150](#)
Shumaliya [313](#)
Shurpu [730](#), [819](#)
Shuruppak [485](#)
Shushtar [13](#), [102](#), [152](#), [184](#), [419](#)
Shutruru [264](#), [420](#), [687](#), [733](#), [735–6](#), [819](#)
Shutrurura [264](#)

Shutur-Nahhunte [253](#), [255](#), [264–5](#), [420](#), [563](#), [622](#), [846](#)
Sidari [468](#)
Siddim [31](#)
Sidon [352](#)
Sigar [153–4](#)
Sigrish [147–8](#)
Silirqatru [729](#)
Simimi [169](#)
Simonides [792](#)
Singamshibu [325](#)
Sippar [209](#), [236](#), [252](#), [326–7](#), [494](#), [820](#)
Sirara [182](#)
Sistan [179](#), [284–5](#), [466](#), [639](#)
Sit Shamshi [51](#), [135](#), [243](#), [523](#), [560](#)
Sitinrupum [147](#)
Siwe-palar-hupak [204](#), [206](#), [209](#), [219](#), [222](#), [305](#), [416](#), [418](#), [469](#), [483](#), [497](#)
Sogdiana [475](#); *see also* [Sugda](#)
Sogdians [157](#)
Spakṛta- [166](#)
Subartu [153](#)
Sugda [168](#); *see also* [Sogdiana](#)
Sumundunash [156](#), [169](#)
Sumuqan [155](#)
Surkh Dum [86](#), [581](#), [631](#), [644](#), [650](#)

Tal-e Eblis [120](#)
Tal-i Ghazir [265](#), [385](#), [451](#), [533](#), [535–7](#), [545](#), [627](#)
Tall-i Mushki [570](#)
Tallak-kutur [731](#)
Talmud [11](#), [18](#), [421](#)
Tammarithu [169](#), [252–4](#), [329–30](#), [336](#), [345](#), [347](#), [355–6](#)
Tammuz [154](#)
Tan-Ruhurater [155](#), [206](#), [208](#), [213–16](#), [232–3](#), [469](#), [633](#)
Tan-Uli [219](#), [633](#), [678–9](#)
Tang-i Bulaghi [102](#)
Taoce [814](#)
Tappe Hesar [120](#)
Tappeh Hosseyniyeh [699](#)

Tappeh Rahmatabad [102](#)

Tappeh Sialk [451](#); *see also* [Tappe Sialk and Tepe Sialk](#)

Tappe Sialk [122](#), [124–5](#); *see also* [Tappeh Sialk and Tepe Sialk](#)

Tarrisa [265](#), [434–5](#), [733](#)

Tarut [182](#), [278](#)

Tasak-sharri [313](#)

Tashritu [244](#)

Tatar [16](#)

Tavernier, L.K. [16](#)

Taylor Cylinder [18](#)

Tazitta [213](#)

Teispid [170–1](#), [256](#), [661](#), [808–12](#), [832](#)

Tell Ağrab [783](#)

Tell Asmar [607](#), [631](#)

Tell Brak [631](#)

Tell Halaf [656](#), [790–1](#)

Tell Hariri [193](#)

Tell Harmal [223](#), [611](#)

Tell Kannas [373](#)

Tello [18](#), [41](#), [56](#), [63](#), [65](#), [71](#), [74](#), [595](#), [607](#), [674](#), [699](#)

Tell Suleimeh [631](#)

Tepe Farukhabad [211](#), [533–4](#), [539](#)

Tepe Gawra [370](#)

Tepe Ghabristan [551–2](#)

Tepe Giyan [56](#), [75](#), [211](#), [631](#), [642](#)

Tepe Hissar [207](#), [278](#), [284–5](#), [372](#), [624](#), [627](#), [639](#), [714](#)

Tepe Jalyan [745](#)

Tepe Mehr Ali [372](#)

Tepe Musian [753](#), [775](#)

Tepe Ozbaki [280](#), [451](#), [741](#)

Tepe Pomp [419](#)

Tepe Sabz [624](#)

Tepe Sharafabad [210](#), [458](#), [535–6](#), [538–9](#), [753](#)

Tepe Sialk [56](#), [75](#), [179](#), [280](#), [372](#), [383](#), [385](#), [561](#), [627](#), [674](#); *see also* [Tappeh Sialk and Tappe Sialk](#)

Tepe Sofalin [280](#), [372](#), [375](#), [385–6](#), [393](#), [451](#), [627](#), [741](#)

Tépé Surkhegan [152](#), [184](#)

Tepe Yahya [120](#), [179](#), [278](#), [280](#), [283](#), [372](#), [375–6](#), [385](#), [451](#), [552](#), [627](#), [630](#), [632](#), [638–40](#), [642](#), [745](#)

Tepti Ahar [573](#), [576](#), [644](#), [745](#), [750–1](#), [769](#), [772](#)

Tepti-Humban-Inshushinak [420](#)

Terah [28](#)

Tetep-mada [219](#), [222](#), [633](#)

Teumman [253](#), [328–30](#), [332–3](#), [335–7](#), [341](#), [343](#), [345–50](#), [353](#), [688](#), [794](#), [796](#), [832](#)

Thadal [12](#)

Tigris [35](#), [193–4](#), [294](#), [315](#), [325–7](#)

Tikni [242](#)

Til-Tuba [253](#), [329–30](#), [332–3](#), [341–3](#), [345](#), [347](#), [357](#), [687–8](#), [796](#)

Tirazzish [810](#)

Tirmium [148](#)

Tirutur [264](#), [732](#)

Transoxania [288](#)

Tunamissah [307](#)

Tupki-tilla [311](#)

Turanian [16–17](#), [639](#)

Ubaid [372](#), [602](#), [605](#), [624](#), [764](#)

Ugarit [559](#)

Ulai(a) River [12](#), [250](#), [325–6](#), [329](#), [341](#), [712](#), [832](#)

Ulburiash [304](#)

Umbadara [342–3](#), [346–7](#)

Umma [155](#), [183](#), [189](#), [216](#), [311](#)

Ummanaldash [349–53](#), [355](#)

Ummanigash [342](#), [346–7](#), [349–50](#), [355](#)

Ummanunu [256](#)

Ummanush [810](#), [819](#)

Unsak [156](#), [169](#), [172](#)

Unzi-kilik [172](#)

Upadarma [810](#)

Upandush [821](#)

Upurkupak [442](#), [729](#)

Urtian, Urtians [87](#), [343](#), [581](#), [769](#), [771](#), [854](#)

Ur Bau [595](#)

Urbilum [193–4](#), [196](#)

Urkeshe [293](#)

Ururimashak [182](#)

Uxians [836](#)

Vaigana- [167](#)

Veshnavesh [107](#), [122](#)

Xsaparapa- [167](#)–[8](#)

Yaba [686](#), [689](#)

Yabrat [194](#)–[6](#), [208](#), [214](#), [457](#), [730](#); *see also* [Ebarti](#)

Yabulmat [213](#)

Yamutbal [150](#), [209](#), [222](#), [304](#)

Yasuj [108](#), [746](#), [803](#)

Zababa [155](#)

Zababa-shuma-iddina [236](#), [309](#)

Zabshali [109](#), [148](#), [196](#), [213](#)–[16](#), [282](#), [457](#)

Zahara [148](#), [184](#), [186](#), [189](#), [281](#)

Zari [169](#), [256](#)–[7](#)

Zasheshi [265](#)

Zedekiah [35](#)

Zeribar [103](#)–[4](#)

Zidanu [148](#)

Zihi [737](#)

Zimri [204](#), [209](#), [222](#), [483](#), [636](#), [711](#)

Zinzi [737](#)

Zizkurra [737](#), [817](#)

Zulum [189](#)

Zurbati [147](#)